UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number 001-39208

Beam Therapeutics Inc.

(Exact name of Registrant as specified in its Charter)

Delaware (*State or other jurisdiction of incorporation or organization*)	**81-5238376** (*I.R.S. Employer Identification No.*)
26 Landsdowne Street Cambridge, MA (*Address of principal executive offices*)	**02139** (*Zip Code*)

Registrant's telephone number, including area code: (857) 327-8775

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	**BEAM**	**Nasdaq Global Select Market**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). YES ☒ NO ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

The number of shares of registrant's common stock outstanding as of November 6, 2020 was 57,965,991.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Such forward-looking statements reflect, among other things:

- our current expectations and anticipated results of operations;
- the initiation, timing, progress and results of our research and development programs and preclinical and clinical studies, including the expected timing of filing Investigation New Drug, or IND, applications and the therapeutic applications of our technology;
- our ability to advance any product candidates that we may develop and successfully complete any clinical studies, including the manufacture of any such product candidates;
- our ability to pursue a comprehensive suite of clinically validated delivery modalities;
- our ability to quickly leverage our initial programs and to progress additional programs to create a clinical portfolio;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments related to our competitors and our industry;
- our ability to leverage the clinical, regulatory, and manufacturing advancements made by gene therapy and gene editing programs to accelerate our clinical trials and approval of product candidates;
- the expected timing, progress and success of our collaborations with third parties and our ability to identify and enter into future license agreements and collaborations;
- developments related to base editing technologies;
- our ability to successfully develop our three distinct pipelines and obtain and maintain approval for our product candidates;
- our ability to successfully establish and maintain a commercial-scale current Good Manufacturing Practice, or cGMP, manufacturing facility and that this facility will be operational in 2023;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain key scientific and management personnel; and
- the impact of the coronavirus disease of 2019, or COVID-19, pandemic on our business.

All of these statements are subject to known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements, market trends, or industry results to differ materially from those expressed or implied by such forward-looking statements. Therefore, any statements contained herein that are not statements of historical fact may be forward-looking statements and should be evaluated as such. Without limiting the foregoing, the words "anticipate," "expect," "suggest," "plan," "believe," "intend," "project," "forecast," "estimates," "targets," "projections," "should," "could," "would," "may," "might," "will," and the negative thereof and similar words and expressions are intended to identify forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Risk Factors" in Part II, Item 1A of this report. Unless legally required, we assume no obligation to update any such forward-looking information to reflect actual results or changes in the factors affecting such forward-looking information.

When we use the terms "Beam," the "Company," "we," "us" or "our" in this Quarterly Report on Form 10-Q, we mean Beam Therapeutics Inc. and its subsidiaries on a consolidated basis, unless the context indicates otherwise.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Beam Therapeutics Inc.
Condensed Consolidated Balance Sheets
(*Unaudited*)
(in thousands, except share and per share amounts)

	September 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 137,903	$ 37,221
Marketable securities	64,317	54,627
Prepaid expenses and other current assets	6,487	2,696
Total current assets	208,707	94,544
Property and equipment, net	29,404	24,290
Restricted cash	14,840	13,332
Operating lease right-of-use assets	21,776	18,957
Other assets	3,546	4,976
Total assets	$ 278,273	$ 156,099
Liabilities, redeemable convertible preferred stock, and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	$ 6,569	$ 7,846
Accrued expenses and other current liabilities	18,309	7,852
Derivative liabilities	16,500	7,800
Current portion of lease liability	4,340	4,337
Current portion of equipment financing liability	1,733	1,303
Total current liabilities	47,451	29,138
Long-term lease liability	23,810	21,187
Long-term equipment financing liability	4,448	4,411
Other liabilities	2,493	418
Total liabilities	78,202	55,154
Commitments and contingencies (See Note 7, *Leases*, and Note 8, *License agreements*)		
Redeemable convertible preferred stock	—	302,049
Stockholders' equity (deficit):		
Preferred stock, $0.01 par value; 25,000,000 and no shares authorized, and no shares issued or outstanding at September 30, 2020 and December 31, 2019, respectively	—	—
Common stock, $0.01 par value; 250,000,000 and 205,000,000 shares authorized, 51,930,943 and 9,981,991 issued, and 50,438,740 and 7,326,185 outstanding at September 30, 2020 and December 31, 2019, respectively	504	73
Additional paid-in capital	501,698	1,851
Accumulated other comprehensive income	41	16
Accumulated deficit	(302,172)	(203,044)
Total stockholders' equity (deficit)	200,071	(201,104)
Total liabilities, redeemable convertible preferred stock, and stockholders' equity (deficit)	$ 278,273	$ 156,099

The accompanying notes are an integral part of these condensed consolidated financial statements.

Beam Therapeutics Inc.
Condensed Consolidated Statements of Operations and Other Comprehensive Loss
(*Unaudited*)
(in thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
License revenue	$ 6	$ 6	$ 18	$ 12
Operating expenses:				
Research and development	29,825	12,543	70,728	34,402
General and administrative	7,502	5,487	21,251	14,393
Total operating expenses	37,327	18,030	91,979	48,795
Loss from operations	(37,321)	(18,024)	(91,961)	(48,783)
Other income (expense):				
Change in fair value of derivative liabilities	2,700	(1,600)	(8,700)	(3,600)
Interest and other income (expense), net	169	619	1,533	1,907
Total other income (expense)	2,869	(981)	(7,167)	(1,693)
Net loss	$ (34,452)	$ (19,005)	$ (99,128)	$ (50,476)
Unrealized (loss) gain on marketable securities	(132)	(35)	25	48
Comprehensive loss	$ (34,584)	$ (19,040)	$ (99,103)	$ (50,428)
Reconciliation of net loss to net loss attributable to common stockholders:				
Net loss	$ (34,452)	$ (19,005)	$ (99,128)	$ (50,476)
Accretion of redeemable convertible preferred stock to redemption value, including dividends on preferred stock	—	(3,262)	(1,277)	(9,451)
Net loss attributable to common stockholders	$ (34,452)	$ (22,267)	$ (100,405)	$ (59,927)
Net loss per common share attributable to common stockholders, basic and diluted	$ (0.69)	$ (3.31)	$ (2.31)	$ (9.58)
Weighted-average common shares used in net loss per share attributable to common stockholders, basic and diluted	50,087,747	6,717,792	43,438,919	6,254,069

The accompanying notes are an integral part of these condensed consolidated financial statements.

Beam Therapeutics Inc.
Condensed Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(*Unaudited*)
(in thousands, except share amounts)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount				
Balance at December 31, 2018	119,308,387	$ 251,434	5,565,368	$ 56	$ 7,256	—	$ (124,718)	$ (117,406)
Issuance of Series B redeemable convertible preferred stock, net of issuance costs of $0.1 million	11,308,397	37,901	—	—	—	—	—	—
Accretion of redeemable convertible preferred stock to redemption value	—	2,963	—	—	(2,963)	—	—	(2,963)
Vesting of restricted common stock	—	—	388,562	4	(4)	—	—	—
Issuance of common stock related to license agreement	—	—	16,725	—	113	—	—	113
Stock-based compensation	—	—	—	—	869	—	—	869
Exercise of common stock options	—	—	12,502	—	7	—	—	7
Net loss	—	—	—	—	—	—	(13,610)	(13,610)
Balance at March 31, 2019	130,616,784	$ 292,298	5,983,157	$ 60	$ 5,278	$ —	$ (138,328)	$ (132,990)
Accretion of redeemable convertible preferred stock to redemption value	—	3,226	—	—	(3,226)	—	—	(3,226)
Vesting of restricted common stock	—	—	393,440	4	(4)	—	—	—
Stock-based compensation	—	—	—	—	2,073	—	—	2,073
Exercise of common stock options	—	—	57,496	1	47	—	—	48
Other comprehensive income	—	—	—	—	—	83	—	83
Net loss	—	—	—	—	—	—	(17,861)	(17,861)
Balance at June 30, 2019	130,616,784	$ 295,524	6,434,093	$ 65	$ 4,168	$ 83	$ (156,189)	$ (151,873)
Accretion of redeemable convertible preferred stock to redemption value	—	3,226	—	—	(3,262)	—	—	(3,262)
Vesting of restricted common stock	—	—	389,261	4	(4)	—	—	—
Stock-based compensation	—	—	—	—	2,029	—	—	2,029
Exercise of common stock options	—	—	80,300	—	81	—	—	81
Other comprehensive loss	—	—	—	—	—	(35)	—	(35)
Net loss	—	—	—	—	—	—	(19,005)	(19,005)
Balance at September 30, 2019	130,616,784	$ 298,750	6,903,654	$ 69	$ 3,012	$ 48	$ (175,194)	$ (172,065)

Beam Therapeutics Inc.
Condensed Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) - Continued
(*Unaudited*)
(in thousands, except share amounts)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Accumulated Deficit	Total Stockholders' (Deficit) Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2019	130,616,784	$ 302,049	7,326,185	$ 73	$ 1,851	$ 16	$ (203,044)	$ (201,104)
Accretion of redeemable convertible preferred stock to redemption value	—	1,277	—	—	(1,277)	—	—	(1,277)
Conversion of redeemable convertible preferred stock to common stock upon closing of initial public offering	(130,616,784)	(303,326)	29,127,523	291	303,035	—	—	303,326
Issuance of common stock from initial public offering, net of issuance costs of $18.7 million	—	—	12,176,471	122	188,201	—	—	188,323
Vesting of restricted common stock	—	—	387,866	4	(4)	—	—	—
Stock-based compensation	—	—	—	—	2,792	—	—	2,792
Exercise of common stock options	—	—	59,305	1	151	—	—	152
Other comprehensive loss	—	—	—	—	—	(360)	—	(360)
Net loss	—	—	—	—	—	—	(30,458)	(30,458)
Balance at March 31, 2020	—	$ —	49,077,350	$ 491	$ 494,749	$ (344)	$ (233,502)	$ 261,394
Vesting of restricted common stock	—	—	387,870	4	(4)	—	—	—
Stock-based compensation	—	—	—	—	2,769	—	—	2,769
Exercise of common stock options	—	—	180,517	1	359	—	—	360
Other comprehensive income	—	—	—	—	—	517	—	517
Net loss	—	—	—	—	—	—	(34,218)	(34,218)
Balance at June 30, 2020	—	$ —	49,645,737	$ 496	$ 497,873	$ 173	$ (267,720)	$ 230,822
Vesting of restricted common stock	—	—	387,867	4	(4)	—	—	—
Issuance of common stock related to license agreement	—	—	175,000	2	262			264
Stock-based compensation	—	—	—	—	3,012	—	—	3,012
Exercise of common stock options	—	—	230,136	2	555	—	—	557
Other comprehensive loss	—	—	—	—	—	(132)	—	(132)
Net loss	—	—	—	—	—	—	(34,452)	(34,452)
Balance at September 30, 2020	—	$ —	50,438,740	$ 504	$ 501,698	$ 41	$ (302,172)	$ 200,071

The accompanying notes are an integral part of these condensed consolidated financial statements.

Beam Therapeutics Inc.
Condensed Consolidated Statements of Cash Flows
(*Unaudited*)
(in thousands)

	Nine Months Ended September 30,	
	2020	2019
Operating activities		
Net loss	$ (99,128)	$ (50,476)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	3,463	2,501
Amortization of investment discount (premiums)	49	(670)
Stock-based compensation expense	8,573	4,971
Change in operating lease right-of-use assets	3,065	1,019
Non-cash research and development license expense, net	5,164	113
Change in fair value of derivative liabilities	8,700	3,600
Other	(517)	—
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(3,667)	(2,055)
Other long-term assets	(56)	(522)
Accounts payable	(134)	1,321
Accrued expenses and other liabilities	4,219	1,371
Operating lease liabilities	(3,249)	(1,441)
Financing milestone liabilities	—	(13,750)
Other long-term liabilities	2,075	(185)
Net cash used in operating activities	(71,443)	(54,203)
Investing activities		
Purchases of property and equipment	(8,232)	(10,358)
Purchases of marketable securities	(167,094)	(111,374)
Maturities of marketable securities	157,380	38,964
Purchase of long-term investment	(750)	(450)
Net cash used in investing activities	(18,696)	(83,218)
Financing activities		
Proceeds from issuance of Series B Preferred Stock, net	—	37,901
Proceeds from initial public offering, net of underwriting discount	192,510	—
Payment of initial and follow-on public offering costs	(1,717)	(1,088)
Proceeds from equipment financings	1,625	3,801
Repayment of equipment financings	(1,158)	(170)
Proceeds from exercise of stock options	1,069	136
Net cash provided by financing activities	192,329	40,580
Net change in cash, cash equivalents and restricted cash	102,190	(96,841)
Cash, cash equivalents and restricted cash—beginning of period	50,553	147,936
Cash, cash equivalents and restricted cash—end of period	$ 152,743	$ 51,095

The accompanying notes are an integral part of these condensed consolidated financial statements.

Beam Therapeutics Inc.
Condensed Consolidated Statements of Cash Flows - Continued
(*Unaudited*)
(in thousands)

	Nine Months Ended September 30,	
	2020	**2019**
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 422	$ 68
Supplemental disclosure of noncash investing and financing activities:		
Conversion of redeemable convertible preferred stock to common stock upon closing of the initial public offering	$ 303,326	$ —
Property and equipment additions in accounts payable and accrued expenses	$ 2,809	$ 1,049
Operating lease liabilities arising from obtaining right-of-use assets	$ 5,795	$ —
Receipt of common stock in exchange for technology license	$ —	$ 460
Issuance of common stock for research and development license	$ 264	$ 113
Equity issuance costs in accounts payable and accrued expenses	$ 342	$ 1,666
Accretion of redeemable convertible preferred stock to redemption value, including dividends on preferred stock	$ 1,277	$ 9,451

The accompanying notes are an integral part of these condensed consolidated financial statements

1. Nature of the business and basis of presentation

Organization

Beam Therapeutics Inc. (the "Company" or "Beam") is a research stage biotechnology company committed to creating a new class of precision genetic medicines, based on the Company's proprietary base editing technology, with a vision of providing life-long cures to patients suffering from serious diseases. The Company was incorporated in January 2017 as a Delaware corporation and began operations in July 2017. Its principal offices are in Cambridge, Massachusetts.

Liquidity and capital resources

Since its inception, the Company has devoted substantially all of its resources to building its base editing platform and advancing development of its portfolio of programs, establishing and protecting its intellectual property, conducting research and development activities, organizing and staffing the Company, business planning, raising capital and providing general and administrative support for these operations. The Company is subject to risks and uncertainties common to early-stage companies in the biotechnology industry including, but not limited to, technical risks associated with the successful research, development and manufacturing of product candidates, development by competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations and the ability to secure additional capital to fund operations. Current and future programs will require significant research and development efforts, including extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel and infrastructure. Even if the Company's drug development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

In connection with the Company's initial public offering, or IPO, the Company's board of directors approved a one-for-4.4843 reverse stock split of its issued and outstanding common stock and stock options and a proportional adjustment to the existing conversion ratios for the Company's redeemable convertible preferred stock effective as of January 24, 2020. Accordingly, all common stock shares, per share amounts, and additional paid in capital amounts for all periods presented in the accompanying financial statements have been retroactively adjusted, where applicable, to reflect the reverse stock split and adjustment to the preferred stock conversion ratios.

In February 2020, the Company completed its IPO in which the Company issued and sold 12,176,471 shares of its common stock, including 1,588,235 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $17.00 per share, for aggregate gross proceeds of $207.0 million. The Company received approximately $188.3 million in net proceeds after deducting underwriting discounts and estimated offering expenses payable by the Company. In connection with the IPO, all outstanding shares of redeemable convertible preferred stock converted into 29,127,523 shares of the Company's common stock.

In October 2020, the Company issued and sold 5,750,000 shares of its common stock, including 750,000 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $23.50 per share, for aggregate gross proceeds of $135.1 million. The Company received approximately $126.6 million in net proceeds after deducting underwriting discounts and estimated offering expenses payable by the Company.

Since its inception, the Company has incurred substantial losses and had an accumulated deficit of $302.2 million as of September 30, 2020. The Company expects to generate operating losses and negative operating cash flows for the foreseeable future. The Company expects that its cash, cash equivalents, and marketable securities as of September 30, 2020 of $202.2 million, along with the proceeds from its common stock offering in October 2020, will be sufficient to fund its operations for at least the next twelve months from the date of issuance of these financial statements. The Company will need additional financing to support its continuing operations and pursue its growth strategy. Until such time as the Company can generate significant revenue from product sales, if ever, it expects to finance its operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. The Company may be unable to raise additional funds or enter into such other agreements when needed on favorable terms or at all. The inability to raise capital as and when needed would have a negative impact on the Company's financial condition and its ability to pursue its business strategy. The Company will need to generate significant revenue to achieve profitability, and it may never do so.

Basis of presentation

The accompanying condensed consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles, or GAAP, and pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Any reference in these notes to applicable guidance is meant to

refer to the authoritative GAAP as found in the Accounting Standards Codification, or ASC, and Accounting Standards Update, or ASU, of the Financial Accounting Standards Board, or FASB.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited financial statements. In the opinion of the Company's management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments that are necessary to present fairly the Company's financial position as of September 30, 2020, the results of its operations and other comprehensive loss, and redeemable convertible preferred stock and stockholders' equity (deficit), for the three and nine months ended September 30, 2020 and 2019, and cash flows for the nine months ended September 30, 2020 and 2019. Such adjustments are of a normal and recurring nature. The results for the three and nine months ended September 30, 2020 are not necessarily indicative of the results for the year ending December 31, 2020, or for any future period. These interim financial statements should be read in conjunction with the audited financial statements as of and for the year ended December 31, 2019, and notes thereto, which are included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 30, 2020.

Consolidation

The accompanying condensed consolidated financial statements include the accounts of Beam Therapeutics Inc. and its wholly owned subsidiaries, Blink Therapeutics Inc., or Blink, which is a Delaware subsidiary that holds certain intellectual property related to RNA base editing, and Beam Therapeutics Securities Corporation, which is a Massachusetts subsidiary created to buy, sell and hold securities. All intercompany transactions and balances have been eliminated in consolidation.

COVID-19-related significant risks and uncertainties

With the ongoing concern related to the COVID-19 pandemic in the first nine months of 2020, the Company has maintained and expanded its business continuity plans to address and mitigate the impact of the COVID-19 pandemic on its business. In March 2020, to protect the health of its employees, and their families and communities, the Company restricted access to its offices to personnel who performed critical activities that must be completed on-site, limited the number of such personnel that could be present at its facilities at any one time, and requested that most of its employees work remotely. In May 2020, as certain states eased restrictions, the Company established new protocols to better allow its full laboratory staff access to the Company's facilities. These protocols included several shifts working over a seven-day-week protocol. The Company expects to continue incurring additional costs to ensure it adheres to the guidelines instituted by the Centers for Disease Control and Prevention, or CDC, and to provide a safe working environment to its onsite employees.

The extent to which the COVID-19 pandemic impacts the Company's business, its corporate development objectives, results of operations and financial condition, and the value of and market for its common stock, will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, social distancing and business closure requirements, and the effectiveness of actions taken globally to contain and treat the disease. Disruptions to the global economy, disruption of global healthcare systems, and other significant impacts of the COVID-19 pandemic could have a material adverse effect on the Company's business, financial condition, results of operations and growth prospects.

While the COVID-19 pandemic did not significantly impact the Company's business or results of operations during the nine months ended September 30, 2020, the length and extent of the pandemic, its consequences, and containment efforts will determine the future impact on the Company's operations and financial condition.

2. Summary of significant accounting policies

The Company's significant accounting policies are disclosed in the audited consolidated financial statements for the year ended December 31, 2019, and notes thereto, which are included in the Company's Annual Report on Form 10-K that was filed with the SEC on March 30, 2020. Since the date of those financial statements, there have been no material changes to Beam's significant accounting policies.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and expenses, and the disclosure of contingent assets and liabilities as of and during the reporting period. The Company bases its estimates and assumptions on historical experience, when available, and on various factors that it believes to be reasonable under the circumstances. The Company evaluates its estimates and assumptions on an ongoing basis. Actual results could differ from these estimates.

The COVID-19 pandemic may have an impact on the development timelines of the Company's pre-clinical programs. Estimates and assumptions about future events and their effects cannot be determined with certainty and therefore require the exercise of judgment. As of the date of issuance of these financial statements, the Company is not aware of any specific event or circumstance that would require the Company to update its estimates, assumptions and judgments or revise the carrying value of its assets or liabilities. These estimates may change as new events occur and additional information is obtained and are recognized in the consolidated financial

statements as soon as they become known. Actual results could differ from those estimates and any such differences may be material to the Company's financial statements.

Cash, cash equivalents, and restricted cash

Cash and cash equivalents consist of standard checking accounts, money market accounts, and all highly liquid investments with an original maturity of three months or less at the date of purchase. Restricted cash represents collateral provided for letters of credit issued as security deposits in connection with the Company's leases of its corporate and manufacturing facilities.

The following table reconciles cash, cash equivalents, and restricted cash reported within the Company's condensed consolidated balance sheets to the total of the amounts shown in the condensed consolidated statements of cash flows (in thousands):

	September 30, 2020	September 30, 2019
Cash and cash equivalents	$ 137,903	$ 37,764
Restricted cash	14,840	13,331
Total cash, cash equivalents, and restricted cash	$ 152,743	$ 51,095

Recent accounting pronouncements

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements*, or ASC 808, which clarifies certain transactions between collaborative arrangement participants should be accounted for as revenue when the collaborative arrangement participant is a customer in the context of a unit of account and precludes recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. ASC 808 will be effective for the Company in the first quarter of fiscal 2021, with early adoption permitted. A retrospective adoption to the date the Company adopted ASC 606, *Revenue from Contracts with Customers*, is required by recognizing a cumulative-effect adjustment to the opening balance or retained earnings of the earliest period presented. The Company is currently evaluating the impact of the adoption of this standard on its financial statements.

3. Property and equipment, net

Property and equipment consist of the following (in thousands):

	September 30, 2020	December 31, 2019
Lab equipment	$ 16,268	$ 12,029
Leasehold improvements	12,706	12,653
Furniture and fixtures	1,040	1,040
Computer equipment	557	547
Construction in process	6,460	2,185
Total property and equipment	37,031	28,454
Less accumulated depreciation	(7,627)	(4,164)
Property and equipment, net	$ 29,404	$ 24,290

The following table summarizes depreciation expense incurred (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Depreciation expense	$ 1,218	$ 908	$ 3,463	$ 2,501

4. Fair value of financial instruments

The Company's financial instruments that are measured at fair value on a recurring basis consist of cash equivalents, marketable securities, and success payment derivative liabilities pursuant to the license agreement between Harvard University, or Harvard, and the Company, or the Harvard License Agreement, and the license agreement between Broad Institute of MIT and Harvard, or Broad Institute, and Blink, or the Broad License Agreement.

The Company also holds investments in privately issued corporate equity securities, which are accounted for investments in equity securities. These investments do not have readily determinable fair values and the Company values such investments based on the cost of the equity securities adjusted for observable market transactions or impairments, if any. As of September 30, 2020, the Company held $2.5 million of investments in privately issued corporate equity securities. During the nine months ended September 30, 2020, as a result of an observable market transaction (Level 2), the Company adjusted the value of its investment and recorded an unrealized gain of $0.5 million in interest and other income (expense), net in the Company's consolidated statements of operations and other comprehensive loss.

ASC 820, *Fair Value Measurements and Disclosures*, establishes a fair value hierarchy for those instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and our own assumptions (unobservable inputs). The hierarchy consists of three levels:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 – Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, directly or indirectly, for substantially the full term of the asset or liability.
- Level 3 – Unobservable inputs that reflect our own assumptions about the assumptions market participants would use in pricing the asset or liability in which there is little, if any, market activity for the asset or liability at the measurement date.

The following table sets forth the fair value of the Company's financial assets and liabilities by level within the fair value hierarchy at September 30, 2020 (in thousands):

	Carrying amount	Fair value	Level 1	Level 2	Level 3
Assets					
Cash equivalents:					
Money market funds	$ 68,891	$ 68,891	$ 68,891	$ —	$ —
Commercial paper	60,987	60,987	—	60,987	—
Corporate notes	9,036	9,036	—	9,036	—
Marketable securities:					
Commercial paper	3,997	3,997	—	3,997	—
Corporate notes	29,223	29,223	—	29,223	—
U.S. Treasury securities	26,035	26,035	—	26,035	—
Government securities	5,062	5,062	—	5,062	—
Total assets	$ 203,231	$ 203,231	$ 68,891	$ 134,340	$ —
Liabilities					
Success payment liability – Harvard	$ 8,200	$ 8,200	$ —	$ —	$ 8,200
Success payment liability – Broad Institute	8,300	8,300	—	—	8,300
Total liabilities	$ 16,500	$ 16,500	$ —	$ —	$ 16,500

The following table sets forth the fair value of the Company's financial assets and liabilities by level within the fair value hierarchy at December 31, 2019 (in thousands):

	Carrying amount	Fair value	Level 1	Level 2	Level 3
Assets					
Cash equivalents:					
Money market funds	$ 6,172	$ 6,172	$ 6,172	$ —	$ —
Commercial paper	3,986	3,986	—	3,986	—
Marketable securities:					
Commercial paper	36,889	36,889	—	36,889	—
Corporate notes	17,738	17,738	—	17,738	—
Total assets	$ 64,785	$ 64,785	$ 6,172	$ 58,613	$ —
Liabilities					
Success payment liability – Harvard	$ 3,900	$ 3,900	$ —	$ —	$ 3,900
Success payment liability – Broad Institute	3,900	3,900	—	—	3,900
Total liabilities	$ 7,800	$ 7,800	$ —	$ —	$ 7,800

Cash equivalents – Money market funds included within cash equivalents are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices in active markets. Commercial paper and corporate notes are classified within Level 2 of the fair value hierarchy because pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined through the use of models or other valuation methodologies.

Marketable securities – The Company measures its marketable securities at fair value on a recurring basis and classify those instruments within Level 2 of the fair value hierarchy. Marketable securities are classified within Level 2 of the fair value hierarchy

because pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reporting date, and fair value is determined using models or other valuation methodologies.

Success Payment Liabilities – As discussed further in Note 8, *License agreements*, the Company is required to make success payments determined based upon the achievement of specified multiples of the initial weighted average value of the Company's Series A Preferred at specified valuation dates. The Company's liability for success payments under the Harvard License Agreement and Broad License Agreement are carried at fair value. To determine the estimated fair value of the success payment liability, the Company uses a Monte Carlo simulation methodology, which models the future movement of stock prices based on several key variables.

The following variables were incorporated in the calculation of the estimated fair value of the Harvard and Broad Institute success payment liabilities:

	Harvard		Broad Institute	
	September 30, 2020	December 31, 2019	September 30, 2020	December 31, 2019
Fair value of Series A Preferred (per share) (1)	$ —	$ 3.60	$ —	$ 3.60
Fair value of common stock (per share)	24.62	—	24.62	—
Expected volatility	73%	72%	73%	72%
Expected term (years)	0.60-8.75	0.10-8.01	0.60-9.61	0.10-8.01

(1) The effect of the Company's one-for-4.4843 reverse stock split in January 2020 only applied to its common stock and did not impact its redeemable convertible preferred stock. As such, the Series A Preferred fair value per share as of December 31, 2019 does not show the effect of the reverse stock split. If adjusted for the effect of the reverse stock split, the fair value per share of Series A Preferred would be $16.14 on December 31, 2019. Upon completion of the Company's IPO, all outstanding shares of redeemable convertible preferred stock converted into shares of the Company's common stock.

At December 31, 2019, the fair value of the Series A Preferred was determined by management with the assistance of an independent third-party specialist. At September 30, 2020, the fair value of the common stock was the market value of the Company's common stock. The computation of expected volatility was estimated using available information about the historical volatility of stocks of similar publicly traded companies for a period matching the expected term assumption. In addition, the Company incorporated the estimated number, timing, and probability of valuation measurement dates in the calculation of the success payment liability.

The following table reconciles the change in the fair value of success payment liabilities based on Level 3 inputs (in thousands):

	Nine Months Ended September 30, 2020		
	Harvard	Broad Institute	Total
Balance at December 31, 2019	$ 3,900	$ 3,900	$ 7,800
Changes in fair value	4,300	4,400	8,700
Balance at September 30, 2020	$ 8,200	$ 8,300	$ 16,500

5. Marketable securities

The following table summarizes the Company's marketable securities held at September 30, 2020 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial paper	$ 3,984	$ 13	$ —	$ 3,997
Corporate notes	29,196	27	—	29,223
U.S. Treasury securities	26,034	1	—	26,035
Government securities	5,062	—	—	5,062
Total	$ 64,276	$ 41	$ —	$ 64,317

The following table summarizes the Company's marketable securities held at December 31, 2019 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Commercial paper	$ 36,875	$ 14	$ —	$ 36,889
Corporate notes	17,736	2	—	17,738
Total	$ 54,611	$ 16	$ —	$ 54,627

The amortized cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity. At September 30, 2020, the balance in accumulated other comprehensive income was comprised solely of activity related to marketable securities. There were no realized gains or losses recognized on the sale or maturity of marketable securities for the nine months ended September 30, 2020 and 2019 and, as a result, the Company did not reclassify any amounts out of accumulated other comprehensive income for the same period.

The Company holds debt securities of companies with high credit quality and has determined that there was no material change in the credit risk of any of its debt securities. The contractual maturity dates of all the investments are less than one year.

6. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following (in thousands):

	September 30, 2020	December 31, 2019
Prime license costs (1)	5,000	—
Process development and manufacturing costs	4,138	593
Employee compensation and related benefits	3,207	3,531
Professional fees	2,776	1,541
Other research costs	1,914	955
Other	1,274	1,232
Total	$ 18,309	$ 7,852

(1) In September 2020, the Company elected to continue its collaboration with Prime Medicine, Inc., or Prime Medicine, and recognized and $5.0 million, which represents the fair value of Beam's common stock to be issued to Prime Medicine. Refer to Note 8, *License agreements*, for further discussion of the Prime Medicine license agreement.

7. Leases

Operating leases

The Company's operating leases are as follow:

- A February 2018 lease for 38,203 square feet of office and laboratory space, which commenced in March 2018 and terminates in September 2028. The lease is subject to fixed-rate rent escalations and provides for $6.1 million in tenant improvements and a term extension option, which was not reasonably certain of exercise.
- An October 2018 lease for laboratory space, which commenced in April 2019 and was amended in March 2020 and April 2020. The amended lease commenced in April 2020 and terminates in December 2025. The amended lease is subject to fixed-rate rent escalations and provides an option to extend the lease for two additional two-year periods through December 31, 2029, which were not determined by the Company to be reasonably certain of being exercised. Upon commencement of the March 2020 amendment, the Company recorded an operating lease right-of-use, or ROU, asset and a lease liability of $4.2 million. Upon commencement of the April 2020 amendment, the Company recorded an operating lease ROU asset and a lease liability of $1.8 million.
- Leases in June and July 2019 for office and laboratory space, both of which commenced in October 2019 and terminate in December 2021. The leases are subject to fixed-rate rent escalations.

The following table summarizes operating lease costs as well as sublease income (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Operating lease costs	$ 1,644	$ 1,001	$ 4,947	$ 2,620
Variable lease costs	249	140	786	439
Short-term lease costs	—	17	—	116
Sublease income	—	(12)	—	(34)
Total	$ 1,893	$ 1,146	$ 5,733	$ 3,141

The following table summarizes the lease term and discount rate:

	September 30, 2020	December 31, 2019
Weighted-average remaining lease term (years)		
Operating leases	6.8 years	7.4 years
Weighted-average discount rate		
Operating leases	9.7%	9.8%

The following table summarizes the cash paid for amounts included in the measurement of lease liabilities (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Operating cash flows used for operating leases	$ 2,014	$ 1,204	$ 5,132	$ 2,906
Operating lease liabilities arising from obtaining ROU assets	—	—	5,795	—

At September 30, 2020, the future minimum lease payments for the Company's operating leases for each of the years ending December 31 were as follows (in thousands):

Remainder of 2020	$ 1,780
2021	6,507
2022	4,745
2023	4,879
2024	5,033
2025	5,123
Thereafter	10,411
Undiscounted lease payments	38,478
Less: imputed interest	(10,328)
Total operating lease liabilities	$ 28,150

In addition to the leases discussed above, the Company is party to an April 2019 lease for office and laboratory space to be built, with the rent payments for the first phase expected to commence at the earliest in late 2021 and the rent payments for the second phase expected to commence at the earliest in the first half of 2022. The lease will terminate 12 years from the second phase commencement date. The lease is subject to fixed-rate rent escalations and provides for $23.4 million in tenant improvements and the option to extend the lease for two terms of five years each. Upon executing the lease, the Company made a security deposit of $11.8 million in the form of a letter of credit, which is included in restricted cash as of September 30, 2020. In October 2020, the Company gained access to the lease space and will record a ROU asset and a lease liability. The minimum amount of anticipated undiscounted lease payments due under this lease is $177.2 million. Further, the tabular disclosure of minimum lease payments above does not include payments due under this lease.

In August 2020, the Company entered into a lease agreement with Alexandria Real Estate Equities, Inc. to build a 100,000 square foot manufacturing facility in Research Triangle Park, North Carolina intended to support a broad range of clinical programs. The lease has a term of fifteen years following the commencement date and provides the Company the option to extend the lease term for two five-year terms. It is subject to fixed rate escalation increases and also provides up to $20.0 million for reimbursement of tenant improvements. As the lease had not commenced as of September 30, 2020, the Company has not recorded an operating lease ROU asset or lease liability for this lease in the accompanying condensed consolidated balance sheets. The lease payments are subject to adjustment following the determination of the total project costs of the landlord. The initial estimate of minimum amount of undiscounted lease payments due under this lease is $63.9 million. The Company expects to invest up to $83.0 million over a five-year period and anticipates that the facility will be operational by the first quarter of 2023. Further, the tabular disclosure of minimum lease payments above does not include payments due under this lease.

Financing obligations

In July 2019 and October 2019, the Company sold certain equipment to a leasing company. Contemporaneous with the closing of the sale, the Company entered into a lease agreement with the leasing company with a term of four years pursuant to which the Company leased back the equipment.

Further, in February 2020, the Company sold additional equipment to the leasing company for a total of $1.6 million and, concurrently, entered into a lease agreement with the leasing company to lease back the equipment for an annual rent of $0.5 million over a term of four years.

The equipment leases are being accounted for as financings as the lease terms are for substantially all the remaining economic life of the underlying equipment. Management concluded that control, including the significant risks and rewards of ownership, did not effectively transfer to the buyer-lessor at the inception of the sale and leaseback transactions. As a result, the transactions are accounted for as failed sale and leasebacks and result in the recognition of financing liabilities.

The future minimum payments related to the equipment financing obligations at September 30, 2020, for each of the years ending December 31 were as follows (in thousands):

Remainder of 2020	$ 551
2021	2,200
2022	2,200
2023	1,550
2024	70
Total	6,571
Less: amounts representing interest at 8.64%	(926)
Plus: residual values	536
Financing obligations	$ 6,181

The following table summarizes the breakdown of the principal and interest portions of the equipment financing payments (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Paydown of principal	$ 410	$ 170	$ 1,158	$ 170
Payment of interest	140	68	422	68

8. License agreements

Harvard license agreement

Under the terms of the Harvard License Agreement, Harvard is entitled to receive success payments, determined based upon the achievement of specified multiples of the initial weighted average value of the Company's Series A Preferred at specified valuation dates. The Company is required to make success payments to Harvard during a period of time, or the Harvard Success Payment Period, which has been determined to be the later of (1) the ninth anniversary of the Harvard License Agreement or (2) the earlier of (a) the twelfth anniversary of the Harvard License Agreement and (b) the third anniversary of the first date on which a licensed product receives regulatory approval in the United States. During the Harvard Success Payment Period, the Company will perform a calculation of any amounts owed to Harvard on each rolling 90-day period, commencing one year after the Company's IPO.

The following table summarizes the Company's success payment liability for Harvard (in thousands):

	September 30, 2020	December 31, 2019
Harvard success payment liability	$ 8,200	$ 3,900

The following table summarizes the expense resulting from the change in the fair value of the success payment liability for Harvard (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Change in fair value of Harvard success payment liability	$ (1,400)	$ 800	$ 4,300	$ 1,800

As of September 30, 2020, no success payments have been paid or are due to Harvard.

In addition, Harvard was entitled to receive financing milestone payments, which were paid by the Company during the year ended December 31, 2019.

The annual maintenance fee under the Harvard License Agreement is recorded as research and development expense. Patent prosecution costs are recognized as expense in the period incurred. As of September 30, 2020, the Company determined that product development and regulatory approval milestones and royalties under the Harvard License Agreement were not probable and, as such, no amounts were recognized for the nine months ended September 30, 2020.

Broad license agreement

Under the terms of the Broad License Agreement, Broad Institute is entitled to receive success payments, determined based upon the achievement of specified multiples of the initial weighted average value of the Blink Series A Preferred at specified valuation dates. The Company is required to make success payments to Broad Institute during a period of time, or the Broad Success Payment Period, which has been determined to be the earliest of (1) the twelfth anniversary of the Broad License Agreement, or (2) the third anniversary of the first date on which a licensed product receives regulatory approval in the United States. During the Broad Success Payment Period, the Company will perform a calculation of any amounts owed to Broad Institute on each rolling 90-day period, commencing one year after the Company's IPO.

The following table summarizes the Company's success payment liability for Broad Institute (in thousands):

	September 30, 2020	December 31, 2019
Broad Institute success payment liability	$ 8,300	$ 3,900

The following table summarizes the expense resulting from the change in the fair value of the success payment liability for Broad Institute (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Change in fair value of Broad Institute success payment liability	$ (1,300)	$ 800	$ 4,400	$ 1,800

As of September 30, 2020, no success payments have been paid or are due to Broad Institute.

In addition, Broad Institute was entitled to receive financing milestone payments, which were paid by the Company during the year ended December 31, 2019.

The annual maintenance fee under the Broad License Agreement is recorded as research and development expense. Patent prosecution costs are recognized as expense in the period incurred. As of September 30, 2020, the Company determined that product development and regulatory approval milestones and royalties under the Broad License Agreement were not probable and, as such, no amounts were recognized for the nine months ended September 30, 2020.

Editas license agreement

In May 2018, the Company entered into a license agreement, or the Editas License Agreement, with Editas Medicine, Inc., or Editas, for certain intellectual property rights owned or controlled by Editas, for specified uses. Under the Editas License Agreement, Editas granted to the Company a worldwide, exclusive, sublicensable license (subject to certain exceptions and conditions) under certain intellectual property controlled by Editas for the use of base editing therapies for the treatment of any field of human diseases and conditions, subject to certain exceptions, or the Beam Field, and the licenses granted or to be granted under the Editas License Agreement, or the Editas Development and Commercialization License. Additionally, Editas granted to the Company a royalty-free, non-exclusive license under certain intellectual property owned or controlled by Editas to perform research activities in the Beam Field. Editas provided the Company with an exclusive option to obtain an Editas Development and Commercialization License to three additional groups of intellectual property owned or controlled by Editas, on a group by group basis, during the specified option period, subject to certain exceptions. Pursuant to the Editas License Agreement, the Company will use commercially reasonable efforts to develop a product that includes the rights licensed to the Company within a specified period of time and to commercialize any such products that have received regulatory approval in certain specified countries.

The annual maintenance fees under the Editas License Agreement are recorded as research and development expense. Annual patent costs are expensed as incurred. In addition, the Company is required to make certain development, regulatory and commercial milestone payments to Editas upon the achievement of specified milestones. As of September 30, 2020, the triggering of these milestone payments was not probable and, as such, no amounts were recognized for the nine months ended September 30, 2020.

Bio Palette

In March 2019, the Company entered into a license agreement, or the Bio Palette License Agreement, with Bio Palette Co., Ltd., or Bio Palette, pursuant to which Beam received an exclusive (even as to Bio Palette), sublicensable license under certain patent rights related to base editing owned or controlled by Bio Palette to exploit products for the treatment of human disease throughout the world, but excluding products in the microbiome field in Asia. In addition, the Company granted Bio Palette an exclusive (even as to Beam) license under certain patent rights related to base editing and gene editing owned or controlled by the Company to exploit products in the microbiome field in Asia. Each party to the agreement retains non-exclusive rights to develop and manufacture products in the microbiome field worldwide for the sole purpose of exploiting those products in its own territory. Each party agrees to certain coordination obligations in the microbiome field if either party determines not to exploit their rights in such field.

Upon the execution of the Bio Palette License Agreement, the Company paid Bio Palette an upfront fee of $0.5 million and issued to Bio Palette 16,725 shares of its common stock valued at $0.1 million, which were recorded as research and development expense for the three months ended March 31, 2019. Upon the issuance of a certain Bio Palette patent in the United States in June 2020, the Company made a milestone payment of $2.0 million and, in July 2020, issued to Bio Palette 175,000 shares of its common stock valued at $0.3 million, which were recognized as research and development expense. The fair value of the common stock issued to Bio Palette under the Bio Palette License Agreement was measured at the inception of arrangement and expensed when the issuance of shares became probable.

9. Collaboration and license agreements

Prime Medicine

In September 2019, the Company entered into a collaboration and license agreement with Prime Medicine to research and develop a novel gene editing technology developed by one of Beam's founders. Under the terms of the agreement, the Company granted Prime Medicine a non-exclusive license to certain of its CRISPR technology (including Cas12b), delivery technology and certain other technology controlled by Beam to develop and commercialize gene editing products for the treatment of human diseases. The Company is not currently using the intellectual property licensed from Prime Medicine in any of its current programs, but it is required to use commercially reasonable efforts to develop new product candidates using the intellectual property licensed from Prime Medicine. Additionally, each party granted to the other party certain exclusive and non-exclusive licenses to certain technology developed after the effective date of the agreement and controlled by the granting party or jointly owned by the parties. Each party has an obligation to assign rights in certain technology developed under the collaboration to the other party.

Beam has an obligation to issue $5.0 million in shares of its common stock to Prime Medicine, and Prime Medicine has an obligation to issue 5,000,000 shares of its common stock to Beam, should Beam elect to extend the collaboration beyond one year. In September 2020, the Company elected to continue the collaboration and, in October 2020, issued 200,307 shares of the Company's common stock to Prime Medicine. The Company recognized $5.0 million, which represents the fair value of Beam's common stock to be issued to Prime Medicine, as research and development expense within the accompanying condensed consolidated statements of operations and other comprehensive loss for the three and nine months ended September 30, 2020, and within accrued expenses in the accompanying condensed consolidated balance sheets as of September 30, 2020. Additionally, in October 2020, the Company received 5,000,000 shares of Prime Medicine's common stock and recognized $0.1 million as an offset to research and development expense within the accompanying condensed consolidated statements of operations and other comprehensive loss for the three and nine months ended September 30, 2020, and within other current assets in the accompanying condensed consolidated balance sheets as of September 30, 2020.

As of September 30, 2020, the Company determined that milestones and royalties under the agreement were not probable of recognition.

Verve

In April 2019, Beam entered into a collaboration and license agreement, or the Verve Agreement, with Verve Therapeutics, Inc., or Verve, to investigate gene editing strategies to modify genes associated with an increased risk of coronary diseases. Under the terms of the Verve Agreement, the Company granted Verve an exclusive license to certain base editor technology and certain delivery technology, and improvements and Verve granted Beam a non-exclusive license under certain know-how and patents controlled by Verve, an interest in joint collaboration technology and an exclusive license (except as to Verve) under certain delivery technology.

As of September 30, 2020, the Company determined that milestones and royalties under the Verve Agreement were not probable of recognition.

10. Preferred and common stock

In January 2020, the Company authorized preferred stock issuable of 25,000,000 shares and increased its authorized common stock issuable to 250,000,000 shares, both with a $0.01 par value per share.

The Company's board of directors approved a one-for-4.4843 reverse stock split of its common stock and stock options and a proportional adjustment to the existing conversion ratios for the Company's redeemable convertible preferred stock effective as of January 24, 2020. Accordingly, all common stock shares, per share amounts, and additional paid-in capital amounts for all periods presented in the accompanying condensed consolidated financial statements and notes thereto have been retroactively adjusted, where applicable, to reflect the reverse stock split.

In February 2020, the Company completed its IPO in which the Company issued and sold 12,176,471 shares of its common stock, including 1,588,235 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $17.00 per share, for aggregate gross proceeds of $207.0 million. The Company received approximately $188.3 million in net proceeds after deducting underwriting discounts and estimated offering expenses payable by the Company. In connection with the IPO, all outstanding shares of the Company's preferred stock converted into 29,127,523 shares of the Company's common stock.

In October 2020, the Company issued and sold 5,750,000 shares of its common stock, including 750,000 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $23.50 per share, for aggregate gross proceeds of $135.1 million. The Company received approximately $126.6 million in net proceeds after deducting underwriting discounts and estimated offering expenses payable by the Company.

11. Stock option and grant plan

Stock option and grant plan

The Beam Therapeutics Inc. 2017 Stock Option and Grant Plan adopted by the Company's board of directors in June 2017 and amended in February and May 2019, provides for the grant of qualified incentive stock options and nonqualified stock options, restricted stock or other awards to the Company's employees, officers, directors, advisors, and outside consultants for the issuance or purchase of shares of the Company's common stock.

In October 2019, the Company's board of directors adopted the Beam Therapeutics Inc. 2019 Equity Incentive Plan, or the 2019 Plan, and, subsequent to the IPO, all equity-based awards are granted under the 2019 Plan. The 2019 Plan provides for grant of qualified and nonqualified stock options, stock appreciation rights, restricted and unrestricted stock and stock units, performance awards, and other share-based awards to the Company's employees, officers, directors, advisors, and outside consultants. As of September 30, 2020, the Company had 8,021,083 shares reserved and 2,387,598 shares available for future issuance under the 2019 Plan.

Stock-based compensation expense recorded as research and development and general and administrative expenses in the condensed consolidated statements of operations and other comprehensive loss is as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Research and development	$ 1,999	$ 1,175	$ 5,577	$ 3,150
General and administrative	1,013	854	2,996	1,821
Total stock-based compensation expense	$ 3,012	$ 2,029	$ 8,573	$ 4,971

Stock options

A summary of option activity under the Company's equity award plans:

	Number of options	Weighted average exercise price
Outstanding at December 31, 2019	4,791,047	$ 4.72
Granted	1,346,146	19.40
Exercised	(469,958)	2.28
Forfeitures	(33,750)	7.33
Outstanding at September 30, 2020	5,633,485	8.32
Exercisable as of September 30, 2020	1,337,259	3.95

The weighted-average grant date fair value per share of options granted in the nine months ended September 30, 2020 was $13.35. As of September 30, 2020, there was $27.2 million of unrecognized compensation expense related to unvested stock options, which is expected to be recognized over a weighted-average period of approximately 2.6 years.

Restricted stock

The following summarizes the Company's restricted stock activity:

	Shares	Weighted-average grant date fair value
Unvested as of December 31, 2019	2,655,806	$ 2.73
Vested	(1,163,603)	2.32
Unvested as of September 30, 2020	1,492,203	$ 3.14

At September 30, 2020, there was approximately $4.7 million of unrecognized stock-based compensation expense related to restricted stock that is expected to vest. These costs are expected to be recognized over a weighted-average period of approximately 0.6 years.

12. Net loss per share attributable to common stockholders

As noted above, for periods in which the Company reports a net loss attributable to common stockholders, potentially dilutive securities have been excluded from the computation of diluted net loss per share as their effects would be anti-dilutive. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common stockholders is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at period end, from the computation of diluted net loss per share attributable to common stockholders because including them would have had an anti-dilutive effect:

	As of September 30,	
	2020	2019
Redeemable convertible preferred stock	—	29,127,523
Unvested restricted stock	1,492,203	3,043,669
Outstanding options to purchase common stock	5,633,485	4,939,038
Total	7,125,688	37,110,230

The following table summarizes the computation of basic and diluted net loss per share attributable to common stockholders of the Company (in thousands except share and per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2020	2019	2020	2019
Numerator:				
Net loss attributable to common stockholders	$ (34,452)	$ (22,267)	$ (100,405)	$ (59,927)
Denominator:				
Weighted average number of common shares, basic and diluted	50,087,747	6,717,792	43,438,919	6,254,069
Net loss per common share attributable to common stockholders, basic and diluted	$ (0.69)	$ (3.31)	$ (2.31)	$ (9.58)

As discussed in Note 9, *Collaboration and license agreements*, as of September 30, 2020, the Company had an obligation to issue $5.0 million in shares of its common stock to Prime Medicine. In October 2020, the Company issued 200,307 shares of Beam common stock to Prime Medicine. The shares are considered issued for the purposes of computing earnings per share at September 30, 2020 as the Company had an obligation to issue the shares as of September 26, 2020.

13. Income taxes

During the three and nine months ended September 30, 2020 and 2019, the Company recorded a full valuation allowance on federal and state deferred tax assets since management does not forecast the Company to be in a taxable position in the near future.

14. Related party transactions

Founders

For the nine months ended September 30, 2020 and 2019, the Company made payments of $0.1 million and $0.1 million, respectively, to each of its three founder shareholders for scientific consulting and other expenses.

Verve

The Company and Verve are parties to a collaboration and license agreement and have a common board member. During the nine months ended September 30, 2020 and 2019, the Company purchased shares of Verve series A preferred stock valued at $0.8 million and $0.4 million, respectively. During the nine months ended September 30, 2020, the Company recognized unrealized gains of $0.5 million on its investment in Verve preferred stock.

The Company purchased certain materials from Verve amounting to $0.3 million, which is recorded as research and development expenses within the accompanying condensed consolidated statements of operations and other comprehensive loss for the nine months ended September 30, 2020, and within accrued expenses in the accompanying condensed consolidated balance sheets as of September 30, 2020. The Company also sold certain materials to Verve amounting to $0.2 million, which is recorded as interest and other income (expense), net within the accompanying condensed consolidated statements of operations and other comprehensive loss for the nine months ended September 30, 2020, and within prepaid expenses and other current assets in the accompanying condensed consolidated balance sheets as of September 30, 2020.

Prime Medicine

The Company and Prime Medicine are parties to a collaboration and license agreement and have a common founder and several common board members. In September 2020, the Company elected to continue its collaboration with Prime Medicine and, in October

2020, as required by the terms under its collaboration and license agreement with Prime Medicine, issued 200,307 shares of the Company's common stock to Prime Medicine. The Company recognized $5.0 million, which represents the fair value of Beam's common stock to be issued to Prime Medicine, as research and development expense within the accompanying condensed consolidated statements of operations and other comprehensive loss for the nine months ended September 30, 2020, and within accrued expenses in the accompanying condensed consolidated balance sheets as of September 30, 2020. Additionally, in October 2020, the Company received 5,000,000 shares of Prime Medicine's common stock and recognized $0.1 million as an offset to research and development expense within the accompanying condensed consolidated statements of operations and other comprehensive loss for the nine months ended September 30, 2020, and within other current assets in the accompanying condensed consolidated balance sheets as of September 30, 2020.

Additionally, in September 2019, in connection with the Company's collaboration and license agreement with Prime Medicine, the Company executed a letter agreement, as amended, to provide certain interim management and startup services to Prime Medicine for up to March 2021. Prime Medicine is obligated to reimburse the Company's out-of-pocket costs incurred in connection with performing the services and, beginning in October 2020, will pay the Company a $30 thousand monthly service fee. For the nine months ended September 30, 2020, the Company did not recognize any amounts for performing such services or incur any out-of-pocket expenses.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes to those statements included elsewhere in this Quarterly Report on Form 10-Q. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Some of the numbers included herein have been rounded for the convenience of presentation. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed in "Risk Factors" in Part II, Item 1A. and elsewhere in this Quarterly Report on Form 10-Q, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, and in the "Item 1A. Risk Factors" section of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Overview

We are a biotechnology company committed to creating a new class of precision genetic medicines based on our proprietary base editing technology, with a vision of providing life-long cures to patients suffering from serious diseases. Our proprietary base editing technology potentially enables an entirely new class of precision genetic medicines that targets a single base in the genome without making a double-stranded break in the DNA. This approach uses a chemical reaction designed to create precise, predictable and efficient genetic outcomes at the targeted sequence. Our novel base editors have two principal components: (i) a CRISPR protein, bound to a guide RNA, that leverages the established DNA-targeting ability of CRISPR, but modified to not cause a double-stranded break, and (ii) a base editing enzyme, such as a deaminase, which carries out the desired chemical modification of the target DNA base. We believe this design contributes to a more precise and efficient edit compared to traditional gene editing methods, which operate by creating targeted double-stranded breaks in the DNA; these breaks can result in unwanted DNA modifications. We believe that the precision of our editors will dramatically increase the impact of gene editing for a broad range of therapeutic applications.

To unlock the full potential of our base editing technology across a wide range of therapeutic applications, we are pursuing a comprehensive suite of clinically validated delivery modalities in parallel. For a given tissue type, we use the delivery modality with the most compelling biodistribution. Our programs are organized by delivery modality into three distinct pipelines: electroporation for efficient delivery to blood cells and immune cells *ex vivo*; lipid nanoparticles, or LNPs, for non-viral *in vivo* delivery to the liver and potentially other organs in the future; and adeno-associated viral vectors, or AAV, for *in vivo* viral delivery to the eye and central nervous system, or CNS.

The elegance of the base editing approach combined with a tissue specific delivery modality, provides the basis for a targeted efficient, precise, and highly versatile gene editing system, capable of gene correction, gene silencing/gene activation, and multiplex editing of several genes simultaneously. We are currently advancing a broad, diversified portfolio of base editing programs against distinct editing targets, utilizing the full range of our development capabilities. We believe the flexibility and versatility of our base editors may lead to broad therapeutic applicability and transformational potential for the field of precision genetic medicines.

We continue to make meaningful advancements across our programs. Within our *ex vivo* platform, we have identified three development candidates to date – two candidates targeting hemoglobinopathies and one candidate in our T-cell therapy program:

- BEAM-101 reproduces single base changes seen in individuals with Hereditary Persistence of Fetal Hemoglobin, or HPFH, to potentially protect them from the effects of mutations causing sickle cell disease or beta thalassemia. We have achieved proof-of-concept *in vivo* with long-term engraftment of base edited human CD34 cells in mice for BEAM-101. Persistence of engraftment and high levels of editing have been confirmed in several preclinical studies, including in studies using material generated at a clinically relevant scale. Following conversations with regulators and supported by our off-target biology assays, we are planning to initiate IND-enabling studies in 2020 and expect to file an IND for BEAM-101 during the second half of 2021.

- BEAM-102 directly corrects the causative mutation in sickle cell disease by recreating a naturally-occurring normal human hemoglobin variant, HbG-Makassar. During the second quarter of 2020, we published preclinical data on BEAM-102 demonstrating that our adenine base editors, or ABEs, can efficiently convert the causative Hemoglobin S, or HbS, point mutation, to HbG-Makassar, with high efficiency (more than 80%). The Makassar variant does not cause hemoglobin to polymerize, or red cells to sickle and, therefore, edited cells are cured through elimination of the disease-causing protein. The results from this study confirmed the ability of the Makassar variant to protect cells from sickling, even in the context of mono-allelic editing (with one sickle allele and one corrected allele).

- BEAM-201 is a potent and specific anti-CD7, multiplex edited, allogeneic CAR-T development candidate for the treatment of relapsed/refractory T-cell acute lymphoblastic leukemia, or T-ALL, a severe disease affecting children and adults with a five-year overall survival of less than 25%. BEAM-201 is produced using a Good Manufacturing Practice, or GMP, -compliant, clinical-scale process in which T-cells derived from healthy donors are simultaneously base edited at four genomic loci then transduced with a lentivirus coding for an anti-CD7 CAR. The resulting cells are universally-compatible, allogeneic ("off the shelf") CD7-targeting CAR-T cells resistant to both fratricide and immunosuppression.

We also continue to advance our liver disease programs. During the second quarter of 2020, we showed the ability to directly correct the mutation causing Alpha-1 antitrypsin deficiency, providing both *in vitro* and *in vivo* proof of concept for base editing to correct this disease. We have also achieved editing levels, in preclinical models, for the correction of the two most prevalent mutations causing Glycogen Storage Disease Type IA, or GSDIa, that could be clinically relevant if reproduced in humans. An important next step for the liver disease programs is finalizing our LNP formulation, and we are making progress on developing a formulation using proof of concept targets. To date, with this formulation, we have shown high levels of editing in mice at doses consistent with clinical use. We are currently conducting non-human primate studies to evaluate our LNP formulation and anticipate initial data in early 2021. We believe we are on track to nominate our first development candidate from our liver portfolio in 2021.

The modularity of our platform means that establishing preclinical proof-of-concept of base editing using a particular delivery modality will potentially reduce risk and accelerate the timeline for additional product candidates that we may develop targeting the same tissue. In some cases, a new product candidate may only require changing the guide RNA. Subsequent programs using the same delivery modality can also take advantage of shared capabilities and resources of earlier programs. In this way, we view each delivery modality as its own unique pipeline, where the success of any one program may pave the way for a large number of additional programs to progress quickly to the clinic.

***Ex vivo* electroporation for hematology: Sickle cell disease and beta-thalassemia**

Sickle cell disease, a severe inherited blood disease, is caused by a single point mutation, E6V, in the beta globin gene. This mutation causes the mutated form of HbS to aggregate into long, rigid molecules that bend red blood cells into a sickle shape under conditions of low oxygen. Sickled cells obstruct blood vessels and die prematurely, ultimately resulting in anemia, severe pain (crises), infections, stroke, organ failure, and early death. Sickle cell disease is the most common inherited blood disorder in the United States, affecting an estimated 100,000 individuals, of which a significant proportion are of African-American descent (1:365 births). Beta-thalassemia is another inherited blood disorder characterized by severe anemia caused by reduced production of functional hemoglobin due to insufficient expression of the beta globin protein. Transfusion-dependent beta-thalassemia, or TDBT, is the most severe form of this disease, often requiring multiple transfusions per year. Patients with TDBT suffer from failure to thrive, persistent infections, and life-threatening anemia. The incidence of symptomatic beta-thalassemia is estimated to be 1:100,000 worldwide, including 1:10,000 in Europe. In the United States, based on affected birth incidence of 0.7 in 100,000 births, and increasing survival rates, we expect the population of individuals affected by this disease to be more than 1,400 and rising. The only potentially curative therapy currently available for patients with sickle cell disease or beta-thalassemia is allogeneic Hematopoietic Stem Cell Transplant, or HSCT; however, this procedure holds a high level of risk, particularly Graft-versus-Host Disease, or GvHD, resulting in a low number of patients opting for this treatment.

We are using base editing to pursue two complementary approaches to treating sickle cell disease and one to treat beta-thalassemia:

- a differentiated approach to elevating fetal hemoglobin which could be used in treatments for both sickle cell disease and beta-thalassemia (BEAM-101); and
- a novel approach to directly correcting the sickle mutation (BEAM-102).

BEAM-101: Recreating naturally-occurring protective mutations to activate fetal hemoglobin

The beneficial effects of the fetal form of hemoglobin, or HbF, to compensate for mutations in adult hemoglobin were first identified in individuals with a condition known as HPFH. Individuals who carry mutations that would have typically caused them to be beta-thalassemia or sickle cell disease patients, but who also have HPFH, are asymptomatic or experience a much milder form of their disease. HPFH is caused by single base changes in the regulatory region of the genes, HBG1 and HBG2, which prevents binding of one or more repressor proteins and increases the expression of gamma globin, which forms part of the HbF tetramer.

Using base editing, we reproduce these specific, naturally occurring base changes in the regulatory elements of the gamma globin genes, preventing binding of repressor proteins and leading to re-activation of gamma globin expression, and thus the increase in gamma globin levels. Our *in vitro* and *in vivo* characterization of BEAM-101 using *ex vivo* delivery achieved precise and efficient editing of human CD34+ hematopoietic stem and progenitor cells, or HSPCs, resulting in long-term engraftment and therapeutically-relevant increases in target gene expression in mice.

In vitro characterization of BEAM-101:

- We demonstrated greater than 90% editing in healthy donor CD34 cells *in vitro*.
- We demonstrated gamma globin upregulation following erythroid differentiation is highly correlated (R^2=0.993) with editing rates, where, at greater than 90% editing we achieve greater than 60% increase in gamma globin in healthy donor CD34+ cells.
- Successful editing of CD34+ cells from a homozygous sickle cell disease patient, demonstrating a greater than 60% increase in gamma globin levels with a concomitant decrease to less than 40% sickle beta globin levels *in vitro* after *in vitro* differentiation.

In vivo performance of BEAM-101:

- We demonstrated that edited CD34+ cells from a healthy human donor engraft with high chimerism and maintain greater than 90% editing after 16 weeks in immunocompromised mice.
- We demonstrated after 16-week engraftment that base edited cells lead to successful multilineage reconstitution with greater than 90% base editing achieved in sorted human HSPCs, myeloid, lymphoid and erythroid cells.
- We replicated these findings with cells from a second donor at 18 weeks post-engraftment.

BEAM-102: Direct correction of the sickle cell mutation

Our second base editing approach for sickle cell disease, BEAM-102, is a direct correction of the causative sickle mutation at position 6 of the beta globin gene. By making a single A-to-G edit, we have demonstrated in primary human CD34+ cells isolated from sickle cell disease patients the ability to create the naturally occurring Makassar variant of hemoglobin. This variant, which was originally identified in humans in 1970, has the same function as the wild-type variant and does not cause sickle cell disease. Distinct from other approaches, cells that are successfully edited in this way are fully corrected, no longer containing the sickle protein.

BEAM-102 uses *ex vivo* delivery of our ABEs to edit CD34+ HSPCs. In cells isolated from donors with sickle cell disease, we achieved greater than 80% correction of the sickle point mutation to the HbG-Makassar variant, following *in vitro* erythroid differentiation. As expected, we observed the simultaneous reduction of HbS to less than 20% of control levels. More than 70% of erythroid colonies derived from edited patient cells showed biallelic editing (yielding cells that are potentially cured, no longer producing any sickle protein at all), and another 20% of cells had monoallelic editing (with one sickle allele and one corrected allele, conferring a level of protection expected to be similar to patients with “sickle cell trait” who do not show significant symptoms of disease) – adding up to 93% of cells with potential elimination of sickle cell disease. Further, the correction of the HbS protein to the HbG-Makassar variant was shown to significantly reduce the propensity of *in vitro* differentiated erythroid cells to sickle when subjected to hypoxia. These findings represent therapeutic levels of correction if translated into the clinic and support advancement of this program to potentially address the underlying genetic cause of sickle cell disease. Published modeling studies suggest that at least 20% of cells no longer having the propensity to sickle, either by expressing HbF or because of the elimination of HbS, may be sufficient to cure the disease. With upregulation levels of more than 60% of gamma globin for Beam-101 or by generating more than 90% of cells having at least one HbS allele corrected in the case of BEAM-102, we have shown, in preclinical models, correction levels significantly above those expected to be disease modifying.

***Ex vivo* electroporation for multiplex editing: CAR-T cell therapies**

We believe base editing is a powerful tool to simultaneously multiplex edit many genes without unintended on-target effects, such as genomic rearrangements or activation of the p53 pathway, that can result from simultaneous editing with nucleases through the creation of double-stranded breaks. The ability to create a large number of multiplex edits in T cells could endow CAR-T cells and other cell therapies with combinations of features that may dramatically enhance their therapeutic potential in treating hematological or solid tumors. The initial indications that we plan to target with these product candidates are relapsed, refractory, T-ALL, and Acute Myeloid Leukemia, or AML. We believe that our approach has the potential to produce higher response rates and deeper remissions than existing approaches. Proof-of-concept experiments have now demonstrated the ability of base editors to efficiently modify up to 8 genomic loci simultaneously in primary human T cells with efficiencies ranging from 85-95% as measured by flow cytometry of target protein knockdown. Importantly, these results are achieved without the generation of chromosomal rearrangements, as detected by a sensitive method (UDiTaS™) and with no loss of cell viability from editing. The proof-of-concept experiments have also demonstrated robust T cell killing of target tumor cells.

BEAM-201: Universal CD7-targeting CAR-T cells

BEAM-201 is a development candidate comprising T cells derived from healthy donors that are simultaneously edited at *TRAC*, *CD7*, *CD52* and *PDCD1* then transduced with a lentivirus encoding for an anti-CD7 CAR to create allogenic CD7 targeting CAR-T cells resistant to both fratricide and immunosuppression. To our knowledge, Beam-201 is the first cell therapy featuring four simultaneous edits. Using our cytosine base editor, or CBE, cells are edited to confer the following benefits:

- *TRAC*: Prevent graft-vs-host disease via the elimination of the existing TCR to ensure that the CAR-T cell only attacks the CAR antigen on the tumor and not the patient’s healthy cells.
- *CD52*: Enable an allogeneic cell source by masking BEAM-201 cells to anti-CD52 lymphodepleting agents to reduce host rejection of BEAM-201 cells.
- *PDCD1*: Minimize immunosuppression of BEAM-201 cells by the tumor microenvironment and prolong efficacy for attacking the tumor.
- *CD7*: Prevent fratricide by eliminating antigens that are shared between malignant cells and CAR-T cells to prevent fratricide (i.e., CAR-T cells attacking each other before they can attack the tumor).

In vitro characterization of BEAM-201 and comparison to nuclease editing:

- Simultaneous base editing at four target loci in primary human T cells using a clinical-scale process, produced 96-99% on-target editing of each of the four genes as measured by next-generation sequencing.
- Simultaneous quad base editing of T cells resulted in no detected genomic rearrangements resulting from the editing process; Cas9 nuclease editing with the same four guide RNAs produced chromosomal aberrations in 22 of 100 cells evaluated.
- Multiplex base editing did not negatively affect cell expansion during manufacturing, while nuclease editing induced significant loss of cell expansion.
- CBE-edited cells decreased expression of the four target genes with minimal effect on other genes, including key members of the p53 pathway that are upregulated in response to DNA double-stranded breaks produced by multiplex editing with nucleases.

Further characterization of BEAM-201 in vitro and in a tumor mouse model:

- The GMP-compliant, clinical-scale process resulted in final BEAM-201 CAR-T cell populations with on-target editing efficiencies between 96-99.9% at each of the four target loci, and 85% CAR-expressing cells. As a result, we estimate that 91% of cells are bi-allelically quad base edited and 77% of cells have all 5 genetic modifications. We believe this is the highest level and uniformity of CAR expression and simultaneous editing across four target sites reported at clinical scale to date.
- BEAM-201 cells demonstrated robust *in vitro* CD7-dependent cytokine production, and rapid *in vitro* cytotoxicity.
- BEAM-201 cells also demonstrated dose-dependent clearance or control, across a 25-fold dose range, of an aggressive disseminated CCRF-CEM T-ALL tumor mouse model.

Non-viral delivery for liver diseases: Alpha-1 antitrypsin deficiency and glycogen storage disorder 1a

Alpha-1 Antitrypsin Deficiency, or Alpha-1, is a severe inherited genetic disorder that can cause progressive lung and liver disease. The most severe form of Alpha-1 arises when a patient has a point mutation in both copies of the SERPINA1 gene at amino acid 342 position (E342K, also known as the PiZ mutation or the “Z” allele). This point mutation causes Alpha-1 antitrypsin, or AAT, to misfold, accumulating inside liver cells rather than being secreted, resulting in very low levels (10%-15%) of circulating AAT. As a consequence, the lung is left unprotected from neutrophil elastase, resulting in progressive, destructive changes in the lung, such as emphysema, which can result in the need for lung transplants. The mutant AAT protein also accumulates in the liver, causing liver inflammation and cirrhosis, which can ultimately cause liver failure or cancer and require patients to undergo a liver transplant. It is estimated that approximately 60,000 individuals in the United States have two copies of the Z allele. There are currently no curative treatments for patients with Alpha-1.

With the high efficiency and precision of our base editors, we aim to utilize our ABEs to enable the programmable conversion of A-to-T and G-to-C base pairs and precisely correct the E342K point mutation back to the wild type sequence.

For a recent study, we engineered novel ABEs and guide RNAs capable of correcting the PiZ mutation, and then used a proprietary non-viral lipid nanoparticle formulation to deliver the optimized reagents to the livers of a PiZ transgenic mouse model. This direct editing approach resulted in an average of 16.9% correction of beneficial alleles at 7 days and 28.8% at three months. This significant increase over the period suggests that corrected hepatocytes may have a proliferative advantage relative to uncorrected cells. In addition, treated mice demonstrate decreased Alpha-1 antitrypsin, or A1AT, globule burden within the liver and a durable, significant increase in serum A1AT active protein at three months, roughly 4.9-fold higher than in controls, levels which we believe would be clinically relevant if achieved in patients. These data indicate the potential for base editing as a one-time therapy to treat both lung and liver manifestations of Alpha-1.

GSDIa, also known as Von Gierke disease, is an inborn disorder of glucose metabolism caused by mutations in the G6PC gene, which results in low blood glucose levels that can be fatal if patients do not adhere to a strict regimen of slow-release forms of glucose, administered every one to four hours (including overnight). There are no disease-modifying therapies available for patients with GSDIa.

Our approach to treating patients with GSDIa is to apply base editing via LNP delivery to repair the two most prevalent mutations that cause the disease, R83C and Q347X. It is estimated that these two-point mutations account for 900 and 500 patients, respectively, in the United States, representing approximately 59% of all GSDIa patients. Animal studies have shown that as little as 11% of normal G6Pase activity in liver cells is sufficient to restore fasting glucose; however, this level must be maintained in order to preserve glucose control and alleviate other serious, and potentially fatal, GSDIa sequelae.

We have identified product candidates that can correct up to 80% of the alleles in cells harboring the Q347X point mutation and approximately 60% of the alleles in cells harboring the R83C mutation. Correction of at least 11% is expected to be clinically relevant and potentially disease modifying for GSDIa patients.

Viral delivery for ocular and CNS disorders: Stargardt disease

The most prevalent mutation in the ABCA4 gene that leads to Stargardt disease is the G1961E point mutation. Approximately 5,500 individuals in the United States are affected by this mutation. Our base editing approach is to repair the G1961E point mutation in the ABCA4 gene. Disease modeling using tiny spot stimuli, or light stimuli through holes that are equivalent in size to a single photoreceptor cell, suggests that only 12%-20% of these cells are sufficient to preserve vision. We anticipate, therefore, that editing percentages in the range of 12%-20% of these cells would be disease-modifying, since each edited cell will be fully corrected and protected from the biochemical defect.

We have identified a base editor that is able to edit approximately 45% of the alleles in recombinant cells carrying the human mutated sequence. Given that the base editor is larger than the packaging capacity of a single AAV, we use a split AAV system that delivers the base editor via two AAV vectors. Once inside the cell, the two halves of the editor are recombined to create a functional base editor. In a human retinal pigment epithelial cell line (ARPE-19 cells) in which we have knocked in the ABCA4 G1961E point mutation, we have demonstrated the precise correction of approximately 75% of the disease alleles at 5 weeks after dual infection with the split AAV system.

Collaborations

We believe our base editing technology has potential across a broad array of genetic diseases. To fully realize this potential, we have established and will continue to seek out innovative collaborations, licenses, and strategic alliances with pioneering companies and with leading academic and research institutions. Additionally, we have and will continue to pursue relationships that potentially allow us to accelerate our preclinical research and development efforts. These relationships will allow us to aggressively pursue our vision of maximizing the potential of base editing to provide life-long cures for patients suffering from serious diseases.

***Ex vivo* electroporation for hematologic diseases and oncology**

Boston Children's Hospital

In July 2020, we formed a strategic alliance with Boston Children's Hospital. Under the terms of the agreement, we will sponsor research programs at Boston Children's to facilitate development of disease-specific therapies using our proprietary base editing technology. Boston Children's will also serve as a clinical site to advance bench-to-bedside translation of our pipeline across certain therapeutic areas of interest, including programs in sickle cell disease and pediatric leukemias and exploration of new programs targeting other diseases.

Magenta Therapeutics

In June 2020, we announced a non-exclusive research and clinical collaboration agreement with Magenta Therapeutics to evaluate the potential utility of MGTA-117, Magenta's novel targeted ADC for conditioning of patients with sickle cell disease and beta-thalassemia receiving our base editing therapies. Conditioning is a critical component necessary to prepare a patient's body to receive the edited cells, which carry the corrected gene and must engraft in the patient's bone marrow in order to be effective. Today's conditioning regimens rely on nonspecific chemotherapy or radiation, which are associated with significant toxicities. MGTA-117 precisely targets only hematopoietic stem and progenitor cells, sparing immune cells, and has shown high selectivity, potent efficacy, wide safety margins and broad tolerability in non-human primate models. MGTA-117 may be capable of clearing space in bone marrow to support long-term engraftment and rapid recovery in patients. Combining the precision of our base editing technology with the more targeted conditioning regimen enabled by MGTA-117 could further improve therapeutic outcomes for patients suffering from these severe diseases. We will be responsible for clinical trial costs related to development of our base editors when combined with MGTA-117, while Magenta will continue to be responsible for all other development costs of MGTA-117.

Non-Viral delivery for liver diseases

Verve Therapeutics

In April 2019, we entered into a collaboration and license agreement with Verve, a company focused on developing genetic medicines to safely edit the genome of adults to permanently lower LDL cholesterol and triglyceride levels and thereby treat coronary heart disease. This collaboration allows us to fully realize the potential of base editing in treating cardiovascular diseases, an area outside of our core focus where the Verve team has significant, world-class expertise. Under the terms of the agreement, Verve received exclusive access to our base editing technology, gene editing, and delivery technologies for human therapeutic applications against certain cardiovascular targets. In exchange, we received 2,556,322 shares of Verve common stock. Additionally, we will receive milestone payments for certain clinical and regulatory events and we retain the option, after the completion of Phase 1 studies, to participate in future development and commercialization, and share 50 percent of U.S. profits and losses, for any product directed against these targets. Verve granted to us a non-exclusive license under know-how and patents controlled by Verve, and an interest in joint collaboration technology. Either party may owe the other party other milestone payments for certain clinical and regulatory events related to the delivery technology products. Royalty payments may become due by either party to the other based on the net sales of any commercialized delivery technology products under the agreement.

In June 2020, Verve reported preclinical proof-of-concept data in non-human primates that demonstrated the successful use of adenine base editors to turn off a gene in the liver. Utilizing ABE technology licensed from us and an optimized guide RNA packaged in an engineered lipid nanoparticle, Verve evaluated *in vivo* liver base editing to turn off proprotein convertase subtilisin/kexin type 9 (PCSK9), a gene whose protein product elevates blood LDL cholesterol or angiopoietin-like protein 3 (ANGPTL3), a gene whose protein product elevates blood triglyceride-rich lipoproteins. We believe these proof-of-concept data, which show we can safely edit the primate genome, represent the first successful application of the base editing technology in non-human primates.

In two separate studies, seven animals were treated with the drug product targeting the PCSK9 gene and seven additional animals with the drug product targeting the ANGPTL3 gene. Whole liver editing, blood protein and lipid levels were measured at two weeks and compared to baseline. The program targeting PCSK9 showed an average of 67% whole liver PCSK9 editing, which translated into an 89% reduction in plasma PCSK9 protein and resulted in a 59% reduction in blood LDL cholesterol levels. The program targeting ANGPTL3 showed an average of 60% whole liver ANGPTL3 editing, which translated into a 95% reduction in plasma ANGPTL3 protein and resulted in a 64% reduction in blood triglyceride levels and 19% reduction in LDL cholesterol levels. In addition, in studies in primary human hepatocytes, clear evidence of on-target editing was observed with no evidence of off-target editing.

Per the terms of our agreement with Verve, we can exercise our right to participate in the future development and commercialization of any programs at the completion of Phase 1 studies.

Viral delivery for ophthalmology and CNS diseases

Institute of Molecular and Clinical Ophthalmology Basel

In July 2020, we announced a research collaboration with the Institute of Molecular and Clinical Ophthalmology Basel, or IOB. Founded in 2018 by a consortium that includes Novartis, the University Hospital of Basel and the University of Basel, IOB is a leader in basic and translational research aimed at treating impaired vision and blindness. Clinical scientists at IOB have also helped to develop better ways to measure how vision is impacted by Stargardt disease. Additionally, researchers at IOB have developed living models of the retina, known as organoids, which can be used to test novel therapies. Under the terms of the agreement, the companies will leverage IOB's unique expertise in the field of ophthalmology along with our novel base editing technology to advance programs directed to the treatment of certain ocular diseases, including Stargardt disease.

Manufacturing

To realize the full potential of base editors as a new class of medicines and to enable our parallel investment strategy in multiple delivery modalities, we are building customized and integrated capabilities across discovery, manufacturing, and preclinical and clinical development. Due to the critical importance of high-quality manufacturing and control of production timing and know-how, we have taken steps toward establishing our own manufacturing facility, which will provide us the flexibility to manufacture numerous different drug product modalities. We believe this investment will maximize the value of our portfolio and capabilities, the probability of technical success of our programs, and the speed at which we can provide life-long cures to patients.

In August 2020, we entered into a lease agreement with Alexandria Real Estate Equities, Inc. to build a 100,000 square foot current Good Manufacturing Practice, or cGMP, compliant manufacturing facility in Research Triangle Park, North Carolina intended to support a broad range of clinical programs. We will invest up to $83.0 million over a five-year period and anticipate that the facility will be operational by the first quarter of 2023. The project will be facilitated, in part, by a Job Development Investment Grant approved by the North Carolina Economic Investment Committee, which authorizes potential reimbursements based on new tax revenues generated through the project. The facility will be designed to support manufacturing for our *ex vivo* cell therapy programs in hematology and oncology and *in vivo* non-viral delivery programs for liver diseases, with flexibility to support manufacturing of our viral delivery programs, and ultimately, scale-up to support potential commercial supply.

For our initial waves of clinical programs, we will use contract manufacturing organizations, or CMOs, with relevant manufacturing experience in genetic medicines.

COVID-19

With the ongoing concern related to the COVID-19 pandemic, we have maintained and expanded the business continuity plans to address and mitigate the impact of the COVID-19 pandemic on our business. In March 2020, to protect the health of our employees, and their families and communities, we restricted access to our offices to personnel who performed critical activities that must be completed on-site, limited the number of such personnel that can be present at our facilities at any one time, and requested that most of our employees work remotely. In May 2020, as certain states eased restrictions, we established new protocols to better allow our full laboratory staff access to our facilities. These protocols included several shifts working over a seven-day-week protocol. We expect to continue incurring additional costs to ensure we adhere to the guidelines instituted by the CDC and to provide a safe working environment to our onsite employees.

The extent to which the COVID-19 pandemic impacts our business, our corporate development objectives, results of operations and financial condition, including and the value of and market for our common stock, will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions,

quarantines, social distancing and business closure requirements, and the effectiveness of actions taken globally to contain and treat the disease. Disruptions to the global economy, disruption of global healthcare systems, and other significant impacts of the COVID-19 pandemic could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

While the COVID-19 pandemic did not significantly impact our business or results of operations during the nine months ended September 30, 2020, the length and extent of the pandemic, its consequences, and containment efforts will determine the future impact on our operations and financial condition.

Critical accounting policies and significant judgements

Our critical accounting policies are those policies which require the most significant judgments and estimates in the preparation of our condensed consolidated financial statements. We have determined that our most critical accounting policies are those relating to stock-based compensation, variable interest entities, fair value measurements, and leases. There have been no significant changes to our existing critical accounting policies discussed in our Annual Report on Form 10-K for the year ended December 31, 2019.

Financial operations overview

General

We were incorporated on January 25, 2017 and commenced operations shortly thereafter. Since our inception, we have devoted substantially all of our resources to building our base editing platform and advancing development of our portfolio of programs, establishing and protecting our intellectual property, conducting research and development activities, organizing and staffing our company, business planning, raising capital and providing general and administrative support for these operations. To date, we have financed our operations primarily through the sales of our redeemable convertible preferred stock and proceeds from our IPO.

We are a development stage company, and all of our programs are at a preclinical stage of development. To date, we have not generated any revenue from product sales and do not expect to generate revenue from the sale of products for the foreseeable future. Since inception we have incurred significant operating losses. Our net losses for the nine months ended September 30, 2020 and 2019 were $99.1 million and $50.5 million, respectively. As of September 30, 2020, we had an accumulated deficit of $302.2 million. We expect to continue to incur significant expenses and increasing operating losses in connection with ongoing development activities related to our portfolio of programs as we continue our preclinical development of product candidates; advance these product candidates toward clinical development; further develop our base editing platform; conduct research activities as we seek to discover and develop additional product candidates; maintenance, expansion enforcement, defense, and protection of our intellectual property portfolio; and hiring research and development, clinical and commercial personnel. In addition, we expect to continue to incur additional costs associated with operating as a public company.

As a result of these anticipated expenditures, we will need additional financing to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances, and licensing arrangements. We may be unable to raise additional funds or enter into such other agreements when needed on favorable terms or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy. We can give no assurance that we will be able to secure such additional sources of funds to support our operations, or, if such funds are available to us, that such additional funding will be sufficient to meet our needs.

Research and development expenses

Research and development expenses consist of costs incurred in performing research and development activities, which include:

- the cost to obtain licenses to intellectual property, such as those with Harvard, Broad Institute, and Editas, and related future payments should certain success, development and regulatory milestones be achieved;
- personnel-related expenses, including salaries, bonuses, benefits and stock-based compensation for employees engaged in research and development functions;
- expenses incurred in connection with the discovery and preclinical development of our research programs, including under agreements with third parties, such as consultants, contractors and contract research organizations;
- the cost of developing and validating our manufacturing process for use in our preclinical studies and future clinical trials;
- laboratory supplies and research materials; and
- facilities, depreciation and other expenses which include direct and allocated expenses.

We expense research and development costs as incurred. Advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. The prepaid amounts are expensed as the benefits are consumed.

In the early phases of development, our research and development costs are often devoted to product platform and proof-of-concept studies that are not necessarily allocable to a specific target, therefore, we have not yet begun tracking our expenses on a program-by-program basis.

We expect that our research and development expenses will increase substantially in connection with our planned preclinical and future clinical development activities, including our planned build-out of our commercial-scale cGMP manufacturing facility.

General and administrative expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in our executive, intellectual property, business development, finance, and administrative functions. General and administrative expenses also include legal fees relating to intellectual property and corporate matters, professional fees for accounting, auditing, tax and consulting services, insurance costs, travel, and direct and allocated facility related expenses and other operating costs.

We anticipate that our general and administrative expenses will increase in the future to support increased research and development activities. We also expect to incur increased costs associated with being a public company, including costs of accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with Nasdaq and SEC requirements, director and officer insurance costs, and investor and public relations costs.

Results of operations *Comparison of the three months ended September 30, 2020 and 2019*

The following table summarizes our results of operations, together with the change in dollars (in thousands):

	Three Months Ended September 30,		
	2020	2019	Change
License revenue	$ 6	$ 6	$ —
Operating expenses:			
Research and development	29,825	12,543	17,282
General and administrative	7,502	5,487	2,015
Total operating expenses	37,327	18,030	19,297
Loss from operations	(37,321)	(18,024)	(19,297)
Other income (expense):			
Change in fair value of derivative liabilities	2,700	(1,600)	4,300
Interest and other income (expense), net	169	619	(450)
Total other income (expense)	2,869	(981)	3,850
Net loss	$ (34,452)	$ (19,005)	$ (15,447)

License revenue

License revenue was $6.0 thousand for the three months ended September 30, 2020 and 2019, representing Verve license revenue recorded under the Collaboration and License Agreement executed in April 2019.

Research and development expenses

Research and development expenses were $29.8 million and $12.5 million for the three months ended September 30, 2020 and 2019, respectively. The increase of $17.3 million was primarily due to the following:

- Increases of $7.4 million in lab supplies and outsourced services, driven primarily by external research services such as CMOs and sponsored research agreements.
- An increase of $5.6 million in milestone and license expenses, primarily related to our agreement with Prime Medicine. During the three months ended September 30, 2020, we recognized a $5.0 million expense, which represents the fair value of our common stock to be issued to Prime Medicine as of September 30, 2020.
- Increases of $2.1 million in personnel-related costs, and $1.2 million in facility-related costs, including depreciation. These increases were due to the growth in the number of research and development employees from 92 at September 30, 2019 to 136 at September 30, 2020, and their related activities, as well as the expense allocated to research and development related to our leased facilities.
- An increase of $0.8 million in stock compensation from additional stock option awards due to the increase in the number of research and development employees as well as an increase in the value of our common stock.

Research and development expenses will continue to increase as we continue our current research programs, initiate new research programs, continue our preclinical development of product candidates, and conduct future clinical trials for any of our product candidates.

General and administrative expenses

General and administrative expenses were $7.5 million and $5.5 million for the three months ended September 30, 2020 and 2019, respectively. The increase of $2.0 million was primarily due to the following:

- Increase of $1.2 million increase in intellectual property costs, and a $0.8 million increase in insurance costs due to increased directors and officers insurance costs as a result of our being a public company, offset by a $0.7 million decrease in corporate legal expenses.

- Increase of $0.6 million in personnel related costs due to an increase in general and administrative employees due to an increase in the number of general and administrative employees from 20 employees as of September 30, 2019 to 30 employees as of September 30, 2020, and $0.2 million increase in stock-based compensation due to an increase in the number of general and administrative employees as well as an increase in the value of our common stock.

Change in fair value of derivative liabilities

During the three months ended September 30, 2020, we recorded $2.7 million of other income related to the change in fair value of success payment liabilities as compared to $1.6 million expense for the three months ended September 30, 2019, primarily as a result of the decrease in the fair value of our common stock as of September 30, 2020 as compared to June 30, 2020. The success payment obligations are still outstanding as of September 30, 2020 and will continue to be revalued at each reporting period.

Interest and other income (expense), net

The decrease in interest and other income (expense), net was primarily due to an increase in interest expense resulting from our equipment financing and a decrease in interest income driven by decreased market rates.

Comparison of the nine months ended September 30, 2020 and 2019

The following table summarizes our results of operations, together with the change in dollars (in thousands):

	Nine Months Ended September 30,		
	2020	2019	Change
License revenue	$ 18	$ 12	$ 6
Operating expenses:			
Research and development	70,728	34,402	36,326
General and administrative	21,251	14,393	6,858
Total operating expenses	91,979	48,795	43,184
Loss from operations	(91,961)	(48,783)	(43,178)
Other income (expense):			
Change in fair value of derivative liabilities	(8,700)	(3,600)	(5,100)
Interest and other income (expense), net	1,533	1,907	(374)
Total other income (expense)	(7,167)	(1,693)	(5,474)
Net loss	$ (99,128)	$ (50,476)	$ (48,652)

License revenue

License revenue was $18.0 thousand for the nine months ended September 30, 2020, representing Verve license revenue recorded under the Collaboration and License Agreement executed in April 2019, compared to $12.0 thousand for nine months ended September 30, 2019.

Research and development expenses

Research and development expenses were $70.7 million and $34.4 million for the nine months ended September 30, 2020 and 2019, respectively. The increase of $36.3 million was primarily due to the following:

- Increases of $15.3 million in lab supplies and outsourced services, driven primarily by external research services such as CMOs and sponsored research agreements.

- An increase of $7.5 million in milestone and license expenses, primarily related to our agreements with Bio Palette and Prime Medicine. During the nine months ended September 30, 2020, we recognized a $5.0 million expense, which represents the

fair value of our common stock to be issued to Prime Medicine as of September 30, 2020, and recorded a $2.3 million milestone paid to Bio Palette as the issuance of a certain patent in the United States became probable.

- Increases of $7.0 million in personnel-related costs, and $3.7 million in facility-related costs, including depreciation. These increases were due to the growth in the number of research and development employees from 92 at September 30, 2019 to 136 and September 30, 2020, and their related activities, as well as the expense allocated to research and development related to our leased facilities.

- An increase of $2.4 million in stock compensation from additional stock option awards due to the increase in the number of research and development employees as well as an increase in the value of our common stock.

General and administrative expenses

General and administrative expenses were $21.3 million and $14.4 million for the nine months ended September 30, 2020 and 2019, respectively. The increase of $6.9 million was primarily due to the following:

- A $2.1 million increase in insurance costs due to increased directors and officers insurance costs as a result of our being a public company, and a $1.8 million increase in intellectual property costs, offset by a $0.5 million decrease in corporate legal expenses.

- A $1.9 million increase in personnel related costs due to an increase in general and administrative employees from 20 employees as of September 30, 2019 to 30 employees as of September 30, 2020, and a $1.2 million increase in stock-based compensation due to an increase in the number of general and administrative employees as well as an increase in the value of our common stock.

Change in fair value of derivative liabilities

During the nine months ended September 30, 2020, we recorded $8.7 million of expense related to the change in fair value of success payment liabilities as compared to $3.6 million expense for the nine months ended September 30, 2019, primarily as a result of the increase in the fair value of our common stock compared to the fair value of our Series A Preferred. The success payment obligations are still outstanding as of September 30, 2020 and will continue to be revalued at each reporting period.

Interest and other income (expense), net

The decrease in interest and other income (expense), net was primarily due to an increase in the fair value of our corporate equity securities, which are accounted for as investments in equity securities, offset by an increase in interest expense resulting from our equipment financing.

Liquidity and capital resources

Since our inception in January 2017, we have incurred significant operating losses. We expect to incur significant expenses and operating losses for the foreseeable future as we advance the preclinical and, if successful, the clinical development of our programs. In February 2020, we completed our IPO in which we issued and sold 12,176,471 shares of our common stock, including 1,588,235 shares of common stock sold pursuant to the underwriters' full exercise of their option to purchase additional shares, at a public offering price of $17.00 per share. We received net proceeds from our IPO of $188.3 million, after deducting underwriting discounts and estimated offering expenses payable by us. To date, we have funded our operations primarily through equity offerings. As of September 30, 2020, we had $202.2 million in cash, cash equivalents, and marketable securities.

In October 2020, we issued and sold 5,750,000 shares of our common stock, including 750,000 shares pursuant to the full exercise of the underwriters' option to purchase additional shares, at a public offering price of $23.50 per share, for aggregate gross proceeds of $135.1 million. We received approximately $126.6 million in net proceeds after deducting applicable underwriting discounts and estimated offering expenses.

To date, we have not generated any revenue from product sales and do not expect to generate revenue from the sale of products for the foreseeable future. We anticipate the need for additional capital in order to continue to fund our research and development, including our plans for preclinical and clinical trials, building and maintaining a commercial-scale cGMP manufacturing facility, and new product development, as well as to fund general operations. As and if necessary, we will seek to raise these additional funds through various potential sources, such as equity and debt financings or through corporate collaboration and license agreements. Especially in light of the COVID-19 pandemic, we can give no assurances that we will be able to secure such additional sources of funds to support our operations, or, if such funds are available to us, that such additional financing will be sufficient to meet our needs. For a more detailed discussion of risks related to COVID-19, please see Part II, Item 1A, *Risk Factors—Risks related to our relationships with third parties*, in this Quarterly Report on Form 10-Q.

Cash flows

The following table summarizes our sources and uses of cash for the nine months ended September 30, 2020 and 2019 (in thousands):

	Nine Months Ended September 30,	
	2020	2019
Net cash used in operating activities	$ (71,443)	$ (54,203)
Net cash used in investing activities	(18,696)	(83,218)
Net cash provided by financing activities	192,329	40,580
Net change in cash, cash equivalents and restricted cash	$ 102,190	$ (96,841)

Operating activities

Net cash used in operating activities for the nine months ended September 30, 2020 was $71.4 million, consisting primarily of our net loss of $99.1 million, an increase in prepaid expenses and other current assets of $3.7 million, and a decrease in operating lease liabilities of $3.2 million; offset by an increase in accrued expenses and other liabilities of $4.2 million, and noncash charges consisting primarily of change in fair value of derivative liabilities of $8.7 million, stock-based compensation expense of $8.6 million, non-cash research and development license expense, net of $5.2 million, depreciation expense of $3.5 million, and change in operating lease ROU assets of $3.1 million.

Net cash used in operating activities for the nine months ended September 30, 2019 was $54.2 million, consisting primarily of our net loss of $50.5 million, a decrease in financing milestone liabilities of $13.8 million resulting from payment of these liabilities, an increase in prepaid expenses and other current assets of $2.1 million, and a decrease in operating lease liabilities of $1.4 million; offset by increases in accounts payable and accrued expenses of $2.7 million, and noncash charges consisting primarily of stock-based compensation expense of $5.0 million, change in fair value of derivative liabilities of $3.6 million, depreciation expense of $2.5 million and change in operating lease ROU assets of $1.0 million.

Investing activities

For the nine months ended September 30, 2020, cash used in investing activities was primarily the net purchases of marketable securities of $9.7 million, and purchases of property and equipment of $8.2 million.

For the nine months ended September 30, 2019, cash used in investing activities was the net purchases of marketable securities of $72.4 million, and purchases of property and equipment of $10.4 million.

Financing activities

Net cash provided by financing activities for the nine months ended September 30, 2020 consisted primarily of proceeds from our IPO of $192.5 million, net of underwriting discounts, and proceeds of $1.6 million from equipment financing, and proceeds from the exercise of stock options of $1.1 million; offset by the payment of equity offering costs of $1.7 million, and repayments of equipment financing liabilities of $1.2 million.

Net cash provided by financing activities for the nine months ended September 30, 2019 consisted primarily of the net proceeds from the issuance of Series B Preferred Stock of $37.9 million, and proceeds of $3.8 million from equipment financing; offset by the payment of IPO costs of $1.1 million.

Funding requirements

Our operating expenses are expected to increase substantially as we continue to advance our portfolio of programs.

Specifically, our expenses will increase if and as we:

- continue our current research programs and our preclinical development of product candidates from our current research programs;
- seek to identify additional research programs and additional product candidates;
- initiate preclinical testing and clinical trials for any product candidates we identify and develop;
- maintain, expand, enforce, defend, and protect our intellectual property portfolio and provide reimbursement of third-party expenses related to our patent portfolio;
- seek marketing approvals for any of our product candidates that successfully complete clinical trials;
- establish a sales, marketing, and distribution infrastructure to commercialize any medicines for which we may obtain marketing approval;
- further develop our base editing platform;

- hire additional personnel including research and development, clinical and commercial personnel;
- add operational, financial, and management information systems and personnel, including personnel to support our product development;
- acquire or in-license products, intellectual property, medicines and technologies;
- build and maintain a commercial-scale cGMP manufacturing facility; and
- continue to operate as a public company.

We expect that our cash, cash equivalents and marketable securities at September 30, 2020, along with the proceeds from our common stock offering in October 2020, will enable us to fund our current and planned operating expenses and capital expenditures for at least the next 12 months. We have based these estimates on assumptions that may prove to be imprecise, and we may exhaust our available capital resources sooner that we currently expect. Because of the numerous risks and uncertainties associated with the development our programs, we are unable to estimate the amounts of increased capital outlays and operating expenses associated with completing the research and development of our product candidates.

Our future funding requirements will depend on many factors including:

- the cost of continuing to build our base editing platform;
- the costs of acquiring licenses for the delivery modalities that will be used with our product candidates;
- the scope, progress, results, and costs of discovery, preclinical development, laboratory testing, manufacturing and clinical trials for the product candidates we may develop;
- the costs of preparing, filing, and prosecuting patent applications, maintaining and enforcing our intellectual property and proprietary rights, and defending intellectual property-related claims;
- the costs, timing, and outcome of regulatory review of the product candidates we may develop;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing, distribution, coverage and reimbursement for any product candidates for which we receive regulatory approval;
- the success of our license agreements and our collaborations;
- our ability to establish and maintain additional collaborations on favorable terms, if at all;
- the achievement of milestones or occurrence of other developments that trigger payments under any additional collaboration agreements we obtain;
- the extent to which we acquire or in-license products, intellectual property, and technologies;
- the costs of operating as a public company; and
- the costs of obtaining, building and expanding our manufacturing capacity.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances, and licensing arrangements. We do not have any committed external source of funds. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends.

If we raise funds through additional collaborations, strategic alliances, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates, or we may have to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce, or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. We can give no assurance that we will be able to secure such additional sources of funds to support our operations, or, if such funds are available to us, that such additional funding will be sufficient to meet our needs.

Contractual obligations

We enter into contracts in the normal course of business with contract research organizations and other vendors to assist in the performance of our research and development activities and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments.

During the nine months ended September 30, 2020, except for the minimum rental commitments disclosed in Note 7, *Leases*, to the condensed consolidated financial statements in this Quarterly Report on Form 10-Q, there were no significant changes to our contractual obligations and commitments described under Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2019.

Off-balance sheet arrangements

We did not have during the periods presented and we do not currently have any off-balance sheet arrangements, as defined under the applicable regulations of the SEC.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. As of September 30, 2020, we had cash, cash equivalents, and marketable securities of $202.2 million, which consisted of cash, money market funds, commercial paper and corporate notes. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term marketable securities. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, we believe an immediate 10% change in interest rates would not have a material effect on the fair market value of our investment portfolio. We have the ability to hold our investments until maturity, and therefore, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our investment portfolio.

We are not currently exposed to significant market risk related to changes in foreign currency exchange rates; however, we do contract with vendors that are located outside of the United States and may be subject to fluctuations in foreign currency rates. We may enter into additional contracts with vendors located outside of the United States in the future, which may increase our foreign currency exchange risk.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and our principal financial officer, evaluated, as of the end of the period covered by this Quarterly Report on Form 10-Q, the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on the evaluation of our disclosure controls and procedures as of September 30, 2020, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures as of such date are effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

We continuously seek to improve the efficiency and effectiveness of our internal controls. This results in refinements to processes throughout the company. There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended September 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We have not experienced any material impact in our internal controls over financial reporting despite our employees working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the COVID-19 pandemic on our internal controls including changes to their design and operating effectiveness.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently subject to any material legal proceedings.

Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. For a detailed discussion of the risks that affect our business, please refer to the section titled "Item 1A. Risk Factors" in each of our 2019 Form 10-K, our Quarterly Report on Form 10-Q for the period ended March 31, 2020 and our Quarterly Report on Form 10-Q for the period ended June 30, 2020. The COVID-19 pandemic may also have the effect of heightening many of the other risks described in the section titled "Item 1A. Risk Factors" in each of our 2019 Form 10-K and quarterly reports, such as risks related to our need to raise additional funding, fluctuation of our quarterly financial results, and our ability to obtain regulatory approvals for our product candidates.

The risk factor set forth below represents new risk factors or those containing changes, including material changes, to the similarly titled risk factor included in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on March 30, 2020.

Our owned patent applications and in-licensed patents and patent applications and other intellectual property may be subject to priority disputes or to inventorship disputes and similar proceedings. If we or our licensors are unsuccessful in any of these proceedings, we may be required to obtain licenses from third parties, which may not be available on commercially reasonable terms or at all, or to cease the development, manufacture, and commercialization of one or more of the product candidates we may develop, which could have a material adverse impact on our business.

Although we have an option to exclusively license certain patents and patent applications directed to Cas9 and Cas12a from Editas, who in turn has licensed such patents from various academic institutions including the Broad Institute, we do not currently have a license to such patents and patent applications. Certain of the U.S. patents and one U.S. patent application to which we hold an option are co-owned by the Broad Institute and MIT, and in some cases co-owned by the Broad Institute, MIT, and Harvard, which we refer to together as the Boston Licensing Parties, and were involved in U.S. interference No. 106,048 with one U.S. patent application co-owned by the University of California, the University of Vienna, and Emmanuelle Charpentier, which we refer to together as the University of California. On September 10, 2018, the Court of Appeals for the Federal Circuit, or the CAFC, affirmed the Patent Trial and Appeal Board of the USPTO's, or PTAB's, holding that there was no interference-in-fact. An interference is a proceeding within the USPTO to determine priority of invention of the subject matter of patent claims filed by different parties.

On June 24, 2019, the PTAB declared an interference (U.S. Interference No. 106,115) between 10 U.S. patent applications ((U.S. Serial Nos. 15/947,680; 15/947,700; 15/947,718; 15/981,807; 15/981,808; 15/981,809; 16/136,159; 16/136,165; 16/136,168; and 16/136,175) that are co-owned by the University of California, and 13 U.S. patents and one U.S. patent application (U.S. Patent Nos. 8,697,359; 8,771,945; 8,795,965; 8,865,406; 8,871,445; 8,889,356; 8,895,308; 8,906,616; 8,932,814; 8,945,839; 8,993,233; 8,999,641; and 9,840,713, and U.S. Serial No. 14/704,551)) that are co-owned by the Boston Licensing Parties, which we have an option to under the Editas License Agreement. In the declared interference, the University of California has been designated as the junior party and the Boston Licensing Parties have been designated as the senior party.

As a result of the declaration of interference, an adversarial proceeding in the USPTO before the PTAB has been initiated, which is declared to ultimately determine priority, specifically and which party was first to invent the claimed subject matter. Following oral arguments on the parties' motions in May 2020, the PTAB issued a decision in September 2020, which included, in part, denying the Boston Licensing Parties motion that the University of California should be estopped in the current proceeding by the PTAB's decision in the prior interference proceeding between the parties (No. 106,048), finding that the Boston Licensing Parties remain the senior party in the proceeding, and holding that the interference will proceed to the second, priority phase. An interference is typically divided into two phases. The first phase is referred to as the motions or preliminary motions phase while the second is referred to as the priority phase. In the first phase, each party may raise issues including but not limited to those relating to the patentability of a party's claims based on prior art, written description, and enablement. A party also may seek an earlier priority benefit or may challenge whether the declaration of interference was proper in the first place. Priority, or a determination of who first invented the commonly claimed invention, is determined in the second phase of an interference. Although we cannot predict with any certainty how long the priority phase will actually take, it may take approximately a year or longer before a decision is made by the PTAB. The 10 University of California patent applications and the 13 U.S. patents and one U.S. patent application co-owned by the Boston Licensing Parties involved in U.S. Interference No. 106,115 generally relate to CRISPR/Cas9 systems or eukaryotic cells comprising CRISPR/Cas9 systems having fused or covalently linked RNA and the use thereof in eukaryotic cells. There can be no assurance that the U.S. interference will be resolved in favor of the Boston Licensing Parties. If the U.S. interference resolves in favor of University of California, or if the Boston Licensing Parties' patents and patent application are narrowed, invalidated, or held unenforceable, we may lose the ability to license the optioned patents and patent application and our ability to commercialize our product candidates may be adversely affected if we cannot obtain a license to relevant third party patents that cover our product candidates. We may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be nonexclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could

require us to make substantial licensing and royalty payments. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, we may be unable to commercialize our base editing platform technology or product candidates or such commercialization efforts may be significantly delayed, which could in turn significantly harm our business.

We or our licensors may also be subject to claims that former employees, collaborators, or other third parties have an interest in our owned patent applications or in-licensed patents or patent applications or other intellectual property as an inventor or co-inventor. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patent applications, such co-owners may be able to license their rights to other third parties, including our competitors. In addition, we may need the cooperation of any such co-owners to enforce any patents that issue from such patent applications against third parties, and such cooperation may not be provided to us.

If we or our licensors are unsuccessful in any interference proceedings or other priority, validity (including any patent oppositions), or inventorship disputes to which we or they are subject, we may lose valuable intellectual property rights through the loss of one or more of our owned, licensed, or optioned patents, or such patent claims may be narrowed, invalidated, or held unenforceable, or through loss of exclusive ownership of or the exclusive right to use our owned or in-licensed patents. In the event of loss of patent rights as a result of any of these disputes, we may be required to obtain and maintain licenses from third parties, including parties involved in any such interference proceedings or other priority or inventorship disputes. Such licenses may not be available on commercially reasonable terms or at all, or may be non-exclusive. If we are unable to obtain and maintain such licenses, we may need to cease the development, manufacture, and commercialization of one or more of the product candidates we may develop. The loss of exclusivity or the narrowing of our patent claims could limit our ability to stop others from using or commercializing similar or identical technology and product candidates. Even if we or our licensors are successful in an interference proceeding or other similar priority or inventorship disputes, it could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could result in a material adverse effect on our business, financial condition, results of operations, or prospects.

Item 2. Unregistered Sales of Equity Securities and Uses of Proceeds

Recent sales of unregistered securities

On July 21, 2020, pursuant to the Bio Palette License Agreement, we issued 175,000 shares of our common stock to Bio Palette in satisfaction of certain milestone payment obligations pursuant to the Bio Palette License Agreement. We relied on the exemption from the registration requirements of the Securities Act under Section 4(a)(2) thereof, for a transaction by an issuer not involving any public offering.

On October 6, 2020 pursuant to the license and collaboration agreement between us and Prime Medicine, we issued 200,307 shares of our common stock to Prime Medicine, in exchange for 5,000,000 shares of Prime Medicine common stock. We relied on exemption from the registration requirements of the Securities Act under Section 4(a)(2) thereof, for a transaction by an issuer not involving any public offering.

Use of proceeds from registered securities

On February 10, 2020, we closed our IPO in which we issued and sold 12,176,471 shares of our common stock, including 1,588,235 shares of common stock sold pursuant to the underwriters' full exercise of their option to purchase additional shares, at a public offering price of $17.00 per share, for aggregate gross proceeds of $207.0 million. All of the shares issued and sold in the IPO were registered under the Securities Act pursuant to a Registration Statement on Form S-1 (File No. 333-233985), which was declared effective by the SEC on February 5, 2020, and a Registration Statement on Form S-1 MEF (File No. 333-236284) filed pursuant to Rule 462(b) of the Securities Act. J.P. Morgan Securities LLC, Jeffries LLC, and Barclays Capital Inc. acted as joint bookrunning managers of the IPO and as representatives of the underwriters. Wedbush Securities Inc. acted as the lead manager for the IPO. The offering commenced on February 5, 2020 and did not terminate until the sale of all the shares offered.

The net offering proceeds to us, after deducting underwriting discounts and estimated offering expenses payable by us of $18.7 million, were $188.3 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10.0% or more of any class of our equity securities or to any other affiliates. We are holding a significant portion of the balance of the net proceeds from the offering in money market funds and short-term investments. There has been no material change in our planned use of the net proceeds from our IPO described in our final prospectus, dated February 5, 2020, filed with the SEC pursuant to Rule 424(b) relating to our Registration Statement on Form S-1.

Item 6. Exhibits.

Exhibit Number	Description of Exhibit	If Incorporated by Reference				Filed Herewith
		Form	File Number	Date of Filing	Exhibit Number	
3.1	Fourth Amended Certificate of Incorporation of Beam Therapeutics Inc.	8-K	001-39208	02/11/2020	3.1	
3.2	Amended and Restated By-laws of Beam Therapeutics Inc.	8-K	001-39208	02/11/2020	3.2	
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Label Linkbase Document					X
101.PRE	XBRL Taxonomy Presentation Linkbase Document					X

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

BEAM THERAPEUTICS INC.

Date: November 10, 2020

By: /s/ John Evans

John Evans
Chief Executive Officer
(Principal executive officer)

Date: November 10, 2020

By: /s/ Terry-Ann Burrell

Terry-Ann Burrell
Chief Financial Officer and Treasurer
(Principal financial and accounting officer)

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John Evans, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Beam Therapeutics Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) [Omitted];

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 10, 2020

By: /s/ John Evans
John Evans
Chief Executive Officer
(Principal executive officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Terry-Ann Burrell, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Beam Therapeutics Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) [Omitted];

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 10, 2020

By: /s/ Terry-Ann Burrell
Terry-Ann Burrell
Chief Financial Officer
(Principal financial and accounting officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Quarterly Report of Beam Therapeutics Inc. (the "Company") on Form 10-Q for the period ending September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 10, 2020

By: /s/ John Evans
John Evans
Chief Executive Officer
(Principal executive officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Quarterly Report of Beam Therapeutics Inc. (the "Company") on Form 10-Q for the period ending September 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 10, 2020

By: /s/ Terry-Ann Burrell
Terry-Ann Burrell
Chief Financial Officer
(Principal financial and accounting officer)